00085440

Digitized with financial assistance from
Hemendra Kothari
on 06 November, 2019

Eg. 6.5

EGYPT AS IT IS.

EGYPT AS IT IS.

BY

J. C. McCOAN.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

£5440
ac

WITH A MAP, TAKEN FROM THE MOST RECENT SURVEY.

CASSELL PETTER & GALPIN:

LONDON, PARIS & NEW YORK.

[ALL RIGHTS RESERVED.]

85440

00085440

EGYPT
AND
EQUATORIAL AFRICA.
compiled from original surveys
and the
last authenticated sources
by
JOHN BOWLES.
1874.

PREFACE.

THE following pages are the outcome of what may claim to be an intimate acquaintance with Egypt, acquired during a long residence in the Levant and several lengthened visits to the country, made specially within the past three years to collect statistical and other information on the spot. Whatever, therefore, may be their merits or defects, few or none of the latter can be laid at the door of previous writers, who have indeed left me almost a virgin corner in the wide field of book-making on Egypt. The antiquities of the country have been exhaustively described by a hundred pens, from Strabo to the last excellent edition of *Murray's Handbook;* but, in English at least, I know of no systematic attempt to sketch its present material and administrative condition. In German, Messrs. Stephan and Lüttke, in their *Das Heutige Aegypten* and *Aegypten Neue Zeit*, have in part done so, but on very different lines from those of the present volume, and in neither case at all completely up to the date of their publications—respectively five and four years ago—since which, too, the situation has in many respects changed. I may at once, therefore, say that my obligation to these writers is *nil*. In French the case is different. Beside Clot Bey's *Aperçu Général sur l'Egypte*—which,

although published forty years ago, contains much that is still instructive—and M. Gallion-Danglar's *Lettres sur l'Egypte Contemporaine* (1865-75)—reprints containing much that was merely ephemeral, and which necessarily omit the whole of the recent administrative and judicial reforms — De Régney Bey's *Statistique de l'Egypte*, and Dor Bey's *Instruction Publique en Egypte* (1872) and *Statistique des Ecoles Civiles* (1875)—are full of information of which I have freely availed myself, though not always adopting M. de Régney's figures up to even his date of writing. But barring these publications and such few others as are acknowledged in footnotes, my information has been either personally collected at first hand, or has been communicated direct from the best official or private sources. In these latter cases I have spared no pains to collate and, as far as possible, to test the accuracy of the statements received. That the result is in every case exact, I cannot venture to say; but that in all it is approximately so, I have little hesitation in asking the reader to believe.

Besides many minor obligations, my acknowledgments are especially due to Ali Pasha Moubarek, *Mustéschar* of the Ministry of Public Works; to Riaz Pasha, Minister of Public Instruction, and to Dor Bey and Mr. Rogers, Inspector-General and Director of the same Department, for the materials of the chapter on that subject[1]; to Mr. Fowler for the admirable map,

[1] This and the chapter on "Slavery" appeared in substance in the February and May numbers of *Fraser's Magazine*.

which, better than any other yet published, depicts Egypt from the Mediterranean to the Equator, and also for much valuable information as to the Barrage and the Soudan railway; to General Marriott for details of the new railway administration; to Mr. Scrivenour and Mr. Caillard for similar information respecting the Customs and Post Office; to Mr. George and Mr. Douglas Gibbs, for particulars respecting the telegraphs; to Mr. Bartlett, a practical farmer of long local experience, for much of the chapter on Agriculture; to Mr. R. J. Moss, for many details of Alexandrian trade; to M'Killop Pasha, for nearly all I have said about the light-houses, and to Mr. Anderson, for much of my information respecting the Daïra sugar factories and other works.

A word in anticipation of a possible objection by my critics: Of the social life of Egypt I have said hardly anything—for the sufficient reason that this has been photographed once for all by Mr. Lane, whose vivid portraiture of the manners and customs of both Arab and Copt is as true still as it was forty years ago. The spread of education and the influence of a much larger European society have effected a few changes, but in the main the native private life of 1877 differs but little, if at all, from that of 1835, and in the *Modern Egyptians* incomparably the best description of it is still to be found.

J. C. M.

Temple, July 2nd.

CONTENTS.

CHAPTER I.

TERRITORY.

PAGE

Sir Bartle Frere's Testimony to Recent Egyptian Progress—Territory has Shared in the General Development—Boundaries of Egypt Proper—Extension South of these—Present Divisions—The Delta—The Northern Lakes—Middle Egypt—The Fayoum—The Saïd—Philæ—The Eastern Desert—The Oases—Red Sea Coast—Geological Divisions—Nile Soil—Nubia to the Soudan—Total Extent of Present Territory. 1

CHAPTER II.

POPULATION.

Diversity of Races—Conflicting Estimates of Total—Census of 1859—Rate of Increase—Present Estimated Totals—Fellaheen—Bedoween—Copts—Abyssinians—Nubians—Jews—Rayah Greeks—Syrians—Armenians—Foreigners—Industrial Distributions of the Whole 20

CHAPTER III.

CITIES AND TOWNS.

Cities and "Mohafzas"—Towns and Villages—Alexandria—First View of Egypt—Napoleon's Estimate of Alexandria—The Old Civilisation and the New—Topography of the Modern City—Its Commercial Revival—Ramleh—To Cairo—The Queen of Eastern Cities—Hausmannisation—The Esbekieh—Cairene Mosques—The Citadel—Social Attractions—Heliopolis—The Pyramids and Sphinx—"Eothen's" Prophetic Rhapsody—The Nile Voyage—Cairene Trade—Helwan—Rosetta—Damietta—Port Saïd—El-Arish and Ismaïlia—Suez—Souakim and Massowah—The other Provincial Chief Towns 38

CHAPTER IV.

EGYPT AND THE PORTE.

PAGE

The Problem of their Relation—The Conquest never Established Full Sovereignty of the Porte—Continued Power of the Mamlouk Beys —The French Invasion — MEHEMET ALI — Elected Viceroy—War with the Porte—The Treaty of 1840—His Subsequent Administration and Death—Ibrahim, Abbas, and Saïd Pashas—Accession of ISMAÏL, a New Epoch—Change of the Succession—"Khedive"—International Recognition of these Changes—Conflict of Juristic Opinion as to their Effect—*De facto* Establishment of an Arab Kingdom—"Egypt for the Egyptians"—Probable Outcome of the War—Independence or British Protection 77

CHAPTER V.

ADMINISTRATION.

L'État, c'est le Khédive—Council and Ministers merely Executants of his Will —His Early Life—After his Accession—Abdeen—Routine of his Highness's Daily Life—His Personal Character—The Ministries—The late Moufettish—His Inordinate Power—The Present Ministry of Finance—Of Foreign Affairs—Of the Interior—Of War and Marine—Of Commerce —Of Public Works and Agriculture—Of Public Instruction and the Wakfs—The Custom House and Post Office—Provincial Administration —Mudirs, Mâmours, Nazirs, and Sheikhs-el-beled—The Chamber of Delegates—Character of Egyptian Officials 87

CHAPTER VI.

FINANCES.

Revenue and Expenditure Forty Years ago—Situation at Commencement of the Present Reign—Present Main Elements of Egyptian Finance—What the Revenue now consists of—The Expenditure—Explanation of its Increase—History of the State Debt—The Crisis of Last Year—Mr. Cave's Mission, and his Report—The French Unification Scheme—Its Failure—The Göshen-Joubert Scheme—Its Merits and Defects—Its Acceptance by the Khedive—The New Financial Administration—Its Guarantees—The Essential Solvency of the Country 121

CHAPTER VII.

THE DAIRAS.

In all, Seven of these Administrations—Only Two Responsible for the Daïra Debt—The Daïra-Sanieh—Its Great Estates and Factories—Their Defective Management—Its Income and Expenditure—The Daïra-

PAGE

Khassa—History of the Debt—Inter-relations of both with the State Treasury—Crisis of Last Year—Exclusive of Daïra Debt from the Göschen-Joubert Scheme—Investigation of Assets and Liabilities—Recent Arrangement for Redemption of the Debt 150

CHAPTER VIII.

COMMERCE.

Steady Growth of Egyptian Trade—Great Increase during Present Reign—Review of Ten Years ending 1875—Exports—Their Chief Details—Ninety per cent. of the whole shipped from Alexandria—Principal Foreign Markets—Diminution of the Transit Traffic compensated by Growth of General Trade—Imports—Whence chiefly received—Their Increase an Evidence of Augmented National Wealth — Probable Re-adjustment of the Customs Tariff 161

CHAPTER IX.

AGRICULTURE.

This has always been the Staple Industry of Egypt—Its Present Principal Conditions—Land Tenure—Its Varieties and Chief incidents—Extent of Land held under each—Their respective Rent Charges—Large Taxable Reserve in the Tithe Lands—Labour Supply—Sufficient with certain Reforms—Wages—Water-supply wholly dependent on the Nile —"Good" and "Bad" Niles—How the Inundation is controlled—Sakkias, Shadoofs, and Taboots—Their Antiquity—Great Economy of Labour if they were replaced by Cheap Machinery—Methods of Cultivation still Rude—Cotton Culture—Capability of its Expansion—Cereals —Their Varieties and Yield—Non-Cereal Crops—Average Gross Value of Produce—With Improved Irrigation, Area of Cultivation may be Largely Increased 176

CHAPTER X.

PUBLIC INSTRUCTION.

Foundations of Present System laid by the Caliphs—Decadence under the Mamlouks—Revival under Mehemet Ali—His Military Schools—His Neglect of Education after the Peace—Further Decline under Abbas Pasha—Greater Liberality of Said—Revival under the Khedive —Three Systems now at Work—The State Schools—Girls' Schools,

PAGE

their Great Success—The Blind and Normal Schools—Municipal Civil Schools—Mosque Colleges—The Azhar—Arab Primary Schools—Native Non-Moslem Schools—Foreign Missionary Schools—Aggregate of the whole—Educational Level of Egypt relatively to Europe . . . 207

CHAPTER XI.

PUBLIC WORKS.

The Great Aggregate of these—*Railways*—Principal Lines of the System—Nearly all Constructed during the Present Reign—Their Average Cost—Low Working Cost—Former Abusive Management—The New Administration—The Soudan Line—*Canals*—Their Two Classes—How they Control and Distribute the Irrigation—Great Additions made to the System during the Present Reign—The Barrage—Its Proposed Completion—*Harbour Works*—At Alexandria—At Suez—*Lighthouses*—Details of the Present Service—Its Efficiency—*Telegraphs*—Existing Lines — External Communication—*Bridges*—Kasr-en-Nil—Ghizeh—Others Built during Present Reign 234

CHAPTER XII.

THE SUEZ CANAL.

This Work a Source of Permanent Loss to Egypt—Its Political Compensations—Ancient History and Variations of the Scheme—Contemplated by Bonaparte — Conflicting Surveys—Opposed by Stephenson—Cairo-Suez Railway Constructed as Substitute—M. de Lesseps—First Concession from Saïd Pasha—English Opposition—Formation of Company—Commencement of Work—Fresh-Water Canal—Withdrawal of *Corvée* Labour—Reference to Emperor Napoleon—His Excessive Award—Further Financial Incidents—Description of the Canal—Economy of Distance—Seven Years' Traffic—Proportion of Flags—Dispute as to Dues—Its Settlement—Capital Account—Cost to Egypt—Compensations—Report of Directors for 1876 263

CHAPTER XIII.

JUDICIAL REFORMS.

The Capitulations—Their Abuse in Egypt—Resultant Scandals—First Action of the Government for their Reform—Memorandum of Nubar Pasha—Negotiations with the English and French Governments—Appointment

PAGE

of an International Commission—Its favourable Report—Opposition of the Porte—French Resistance—Assent of the Other Powers—Inauguration of the New Courts—Their Organisation and Jurisdiction—Great Success of the Reform—Its Effect on the Future of Justice in Egypt 282

CHAPTER XIV.

MANUFACTURING AND OTHER INDUSTRIES.

Skilled Industries not Improved Proportionately to Agriculture and Commerce—Misdirected Efforts of Mehemet Ali to Promote them—Official List of Trades, Incomplete—*Esnafs*, or Trade Guilds—Weavers—Metal Workers—Workers in Wood—Masons and Bricklayers—Tanners and Curriers—Potters—Paper-making—The Boulak Mill—Bakers and Millers—Embroiderers—Goldsmiths—Turners—The Old *Mushrabeeyahs*—Modern Skilled Labour chiefly done by Europeans—Artificial Egg-hatching—Cotton-factory Workers—Poverty of Mineral Resources—Saltpits — Natron Lakes — Petroleum — Fisheries—Nile Boatmen—General Inferiority of Native Skilled Work—No Chance of Competing with Europe—True Policy of Government to Encourage Agriculture . 296

CHAPTER XV.

SLAVERY.

Popular Misconception on this Subject—Difference between Eastern and Western Slavery—Property in the Person almost the only Common Feature—Status of Slave better in Egypt than in Turkey—Universality of the Institution—Different Classes of Slaves—Circassians now Rare—Abyssinians and Soudanis—Egyptian Slaves protected by Religion and Public Sentiment—Additional Safeguards decreed by the Khedive—Their Abuse by the Consuls—Consequent Limitation of Consular Interference—Existing Facilities of Emancipation—The Slave Trade legally Abolished, but still surreptitiously carried on—How it is fed—Prices—The Institution now merely a mild Domestic Servitude—Acknowledged Cruelties of Slave-hunting—The Khedive honestly bent on its Abolition—Colonel Gordon's Commission . . 315

CHAPTER XVI.

FAUNA AND FLORA.

The Camel—The Ass—The Horse—The Ox—The Buffalo—Sheep and Goats—The Pig, "Unclean" to Christian, Moslem, and Jew—Dogs and Cats— Indigenous Wild Animals—Crocodiles and Hippopotami—

PAGE

Abundant Ornithology—Tame Fowl—Wild Fowl—Ophidians—Fish—Native Trees less numerous than Animals—Palms—Sycamores—Acacias—Tamarisks—Poplars—Cypresses—Mulberries—Olives—Exotics, very numerous—Their Varieties 331

CHAPTER XVII.

CLIMATE.

Generally, Dry and Hot—Considerable Difference between Coast and Interior—No Real Winter in Egypt—The *Khamsin*—Mean Summer Temperature at Cairo—Scarcity of Rain—Climate of the Isthmus—Mean Annual Rates of Temperature—Regularity of the Wind—Egyptian and European Death-rates—The Nile Valley anciently Famous as a Sanatarium—Testimony of Rev. A. C. Smith—Corroborated by Drs. Dalrymple, Patterson, Walker, Zagiel, and Pruner—Endemic Diseases—Improving Sanitary Administration—Consensus of Medical Opinion in favour of Egypt as a Health-resort 344

CHAPTER XVIII.

THE SOUDAN.

Its Geographical Area—Dongola—Berbera—Taka—Shendy and Halfé—Sennaar—Khartoum—Kordofan—Darfour—The Shillook Country—Darfertit and Donga—Sir S. Baker's Expedition—Colonel Gordon—Successful Results of his First Expedition—His new Commission as Governor-General—Expressed Determination to Extinguish the Slave Trade—The Opposing Difficulties—Antiquity and Wide-spread Sources of the Traffic—Trade of the Soudan—Its Export Routes—Development that may be Expected with Improved Communications—Results already Achieved—The Khedive's Claim on European Confidence 361

APPENDIX A.

THE VICEREGAL FAMILY 377

APPENDIX B.

EGYPTIAN CURRENCY, WEIGHTS, AND MEASURES 378

APPENDIX C.

EGYPTIAN CALENDARS 380

PAGE

APPENDIX D.

MILITARY GRADES AND RATES OF PAY 381

APPENDIX E.

COST OF LIVING IN EGYPT 382

APPENDIX F.

EGYPTIAN TRADE WITH GREAT BRITAIN 383

APPENDIX G.

MR. CAVE'S REPORT ON THE FINANCIAL CONDITION OF EGYPT. 384

APPENDIX H.

THE FINANCIAL DECREES 407

EGYPT AS IT IS.

CHAPTER I.

TERRITORY.

Sir Bartle Frere's Testimony to Recent Egyptian Progress—Territory has Shared in the General Development—Boundaries of Egypt Proper—Extension South of These—Present Divisions—The Delta—The Northern Lakes—Middle Egypt—The Fayoum—The Saïd—Philæ—The Eastern Desert—The Oases—Red Sea Coast—Geological Divisions—Nile Soil—Nubia to the Soudan—Total Extent of Present Territory.

"THERE is one Arab Power to which the eyes of all friends of Africa naturally turn with hopefulness. Egypt has ever been the great centre of African civilisation in the hands of the present dynasty, which may fairly be said to represent much that is excellent in European civilisation. Of the enormous increase of the aggregate wealth of the country there can be no doubt. Steam and railways have done at least as much for Egypt as for almost any European country." In the progress thus attested by so competent a witness as Sir Bartle Frere,[1] lies the *raison d'être* of the present volume. On Egypt of the past and the charms of modern travel—if the lotus-life of Nile voyaging can be so called—from the Mediterranean to the Cataracts a whole literature has been written; but the shelves of the British Museum may be searched in vain

[1] At the Edinburgh Philosophical Institution, January 5, 1874.

for any comprehensive account of the economical state of the country *as it is*. Yet this New Egypt, which has risen not on the ruins of, but side by side with the imperishable old—railways and telegraphs, sugar factories and cotton-gins mingling not incongruously with pyramids, rock-tombs, temples, and hieroglyphs dating from before Abraham—is rich beyond any other part of Africa in practical interest to the capitalist and the politician. There, in the northern extremity of this great continent, as nowhere else but in our own colonies of the south, the new civilisation has taken root, and, slow as necessarily is its growth in a soil impoverished by so long a barbarism, it already gives promise of a strength and expansiveness which have no parallel in the East.

In any attempt to sketch the outcome, thus far, of this great national revival, the country itself first claims notice, not alone as the scene of the changes in progress, but as having also largely shared in the development. A glance, therefore, at the area over which this salutary revolution is at work may conveniently precede some detailed statement of its results. The limits of the territory now subject to the Khedive can, however, be only approximately fixed. Egypt proper is bounded definitely enough on the north by the Mediterranean, from Cape Hazaïf to El-Arish on the frontier of Palestine; westward, by the Libyan desert; east, by a line drawn from El-Arish to Akabah at the head of the gulf of that name, and thence enclosing the peninsula of Sinai, down the western shore of the Red Sea to Cape Benas; and on the south by the First Cataract, between Assouan and Philæ. But the regular parallelogram thus described forms less than one-fifth of the whole geographical area over which the Cairo Government now

claims dominion. In 1821–2, an expedition under Ismaïl Pasha, the third son of Mehemet Ali, over-ran and annexed Nubia; and since then have been added the whole of the western coast of the Red Sea, and that of the Indian Ocean as far as Berbera, opposite Aden, and inland the Nile basin, anywhere between Khartoum and the Equator.[1] But beyond Khartoum, the authority of the Khedive is as yet only in course of consolidation, and no definite line can be drawn as its exact southern boundary. Practically, however, its limit may for the present be fixed at Gondokoro (lat. 4° 55′ N.), beyond which Gordon Pasha is now operating to complete the work begun by Sir Samuel Baker, by effectively annexing the country between that point and the shores of the Albert and Victoria Lakes. A rough extension of the western boundary line from the parallel of Philæ, up through the Desert, so as to include Darfour, the Darfertit country, Gondokoro, and the territory south of Sennaar, round conterminously with Abyssinia to the Red Sea at Massowah, would therefore more or less accurately describe the present limits of Egyptian sovereignty towards the Equator. A glance at

[1] "History teaches us that Egypt is bounded on the north by the Mediterranean, and on the south by the Cataract of Assouan. But history, in fixing these limits, does not take into account the indications furnished both by geography and ethnography. At the north-east of the African continent, from the sea to the Equator, there extends an immense tract of country formed by the Nile, and fertilised by it alone. On the other hand, of the various races that people the banks of the river, some are uncivilised, savage, and incapable of governing themselves, while on this side of the tropic we meet with a nation which, on the contrary, merits the admiration of mankind on account of its glory, its industry, and all the elements of civilisation contained in it. History then ought rather to say that Egypt extends wherever the Nile flows, and that consequently Egypt has the right to claim as her domain all the countries watered by this celebrated river as far as they extend towards the south."—Mariette Bey, *Aperçu de l'Histoire d'Egypte*, 1872.

the map will show that the vast tract of Eastern Africa thus enclosed measures more than 1,600 miles from north to south, and has an average breadth of about 350 miles from the Red Sea into the Libyan desert. But interesting as may be the future of the great group of countries within this area south of Egypt proper, two-thirds of it are as yet little more than a geographical expression. Now, as fifty years ago, the "Egypt" both of politics and trade is still confined to the Delta and the rich river valley between its apex and Assouan, and to a description of the present condition of these the following pages will be mainly limited.

The old territory, then, of the Pharaohs, of the Ptolemies, the Cæsars, the Arabian Caliphs, the Turks, and now of the Khedive, lies within lat. 31° 37′ and 24° 3′ N., between the Mediterranean and the First Cataract, above which the Nile, issuing from the rocky glen of Nubia, sweeps in a smooth but rapid stream round the little island of Philæ, and then, a couple of miles below, hurries down the rapids[1] of Assouan—Juvenal's Syene—into the *Mizraim* of the Hebrews, the *Misr* of its present possessors, and the *Egypt* of western geography. The country whose southern boundary is thus definitely fixed, properly divides itself into Upper and Lower Egypt, the latitude of Cairo (30° 6′ N.) being the most obvious line of demarcation; but modern geographers and the actual Govern-

[1] These Nile cataracts, of which there are in all seven, are not in fact cataracts at all, but mere rapids, in which the stream is obstructed by broken ridges of rock that rise above its surface and vex it into whirling eddies which, though difficult and even dangerous of passage, have no resemblance to the tremendous "falls" of the great American rivers. This First Cataract of Assouan consists of a series of such obstructions extending over three miles, from the small island of Sehayl up to within two miles of Philæ, and the entire descent over the whole distance is only about seventy feet.

ment have recognised the ancient distribution into three provinces, now respectively called Lower, Middle, and Upper Egypt—*El-Bahari*, *El-Vostani*, and *El-Saïd*—the further administrative subdivisions of which will in due course be described. In point of area, fertility, and commercial activity, the first of these three main divisions to which, because of its triangular shape, the Greeks gave its name of the Delta, is the most important section of the country. The base of the irregular triangle enclosed within the two branches of the river, and to which this name strictly applies, is only eighty-one miles long, and its entire area about 2,000 square miles. The complete shore-line of this larger district extends for about a hundred and sixty miles along the old historic sea from the well-known landmark named the "Arab's Tower" to the ruins of Pelusium; but the actual territory of Egypt stretches considerably farther east and west. This coast-line includes the three ports of Alexandria, Rosetta, and Damietta, to which has now to be added that of Port Saïd at the entrance of the Suez Canal. Inland, this fine district tapers to a point near the village of Om-el-Dinar, close to which—about eighty miles from the sea and twelve below Cairo—the Nile divides into the two great branches which, flowing respectively north-west and north-east, enter the Mediterranean at Rosetta and Damietta.[1] The five other ancient mouths of the river have long ago silted up, and their courses can now be hardly traced over the great alluvial plain and through the network of canals and lakes which interpose between the sea and this point.[2] Strictly, Alexandria lies outside the Delta, but

[1] In the time of Herodotus the apex of the Delta was at Cercasorum, ten miles below Memphis, or six miles higher up than at present.

[2] The seven estuaries known to the ancients were—1, the Canopic,

in common phrase the latter includes the whole of the cultivable land as well east and west of, as within, the two branches of the river. Some description will be given further on of the magnificent harbour works now in progress, which, when completed, will render this fine port the safest and most commodious in the Mediterranean. Enough here to say that the predictions of its decadence after the opening of the Suez Canal have been wholly falsified, and that with a population of more than 212,000, railway communication with all parts of the interior, and a steadily increasing trade, this historic city is recovering much of its former prosperity, and is rapidly becoming, in fact as in name, the Liverpool of the East. The position of Rosetta and Damietta is of course much inferior, the bars at their respective mouths of the Nile confining their trade within narrow limits, but the official statistics show both to be making steady growth in industrial and commercial activity. The chief inland towns of the section are Tanta, Zagazig, Damanhour, and Mansourah, to which subsequent allusion will be made.

The fertile land of the Delta is separated from the Mediterranean by a chain of brackish lagoons which are themselves fenced in from the sea by narrow belts of rock and sand-bank, on which a few wild and stunted date-palms form the only vegetation. The chief of these lakes are Mareotis, Etko, Bourlos, and Menzaleh.

corresponding to the present outlet from Lake Etko, or, according to others, to that of the Aboukir or Maadée Lake; 2, the Bolbotine mouth at Rosetta; 3, the Sebenitic, probably the opening into the present Lake Bourlos; 4, the Phatnitic or Bucolic, at Damietta; 5, the Mendesian, which is lost in Lake Menzaleh, the mouth of which is represented by that of Debeh; 6, the Tanitic or Saitic, some traces of which are visible eastwards of Lake Menzaleh, under the modern name of Om-Faridjé; and 7, the Pelusaic, which seems to be represented by what is now the most easterly outlet of Lake Menzaleh, where the ruins of Pelusium are still visible.

The first is the most western, and though now little more than a salt marsh—except during the inundation, when its contents are swelled by filtration—it was up to about 200 years ago navigable, and contributed considerably to the commercial importance of Alexandria, immediately behind which it lies. A project for the drainage of this lake has been mooted, but although a vast tract of valuable land would thus be reclaimed to cultivation, the cost of the work will probably postpone for some years any attempt to carry it out. Lake Etko, a few miles farther east, is only separated from the sea by a still narrower strip of shore, and when nearly full, during the inundation, spreads up to the town of Rosetta. Bourlos, also close along the sea, extends more than forty miles east of the latter town, with an average but irregular width of nearly ten miles, and, like the others, is shallow throughout. Lake Menzaleh, the most eastern and largest of the series, extends from near Damietta to the mouth of the old Tanitic branch, for about forty miles in length by eighteen in width. It is deeper than the other lakes, and supports a considerable fishing population in the villages and islands along its southern shore. Altogether a frontier of nearly 200 miles is covered by these lagoons.

Immediately above the village of Om-el-Dinar, the Delta narrows into the valley of Middle Egypt, which contains Cairo, the Pyramids, the fine province of the Fayoum, and the broad belt of cultivated and fertile land on both banks of the river, as high up as Manfalout. The average width of the whole cultivable valley above Cairo to Assouan is about six miles, but at some points it much exceeds this; while at others the hills which almost continuously flank the river on both sides, close in upon it so as to narrow the arable space to less than a

mile. The eastern of these ranges rises, northwards, near the Isthmus of Suez, whence it approaches Cairo in the spur called the Jebel-Mokattem, which trends round towards the river a few miles above the city, and then, following the winding course of the stream, skirts it, with occasional breaks, far up into Nubia. The best known of the openings in this range are the so-called Valley of the Wanderings, leading from the neighbourhood of Cairo to the head of the Gulf of Suez; and, higher up, the defile through which pass the caravan routes from Kenneh and Coft to Cosseir. Westwards the Libyan range first approaches the river in nearly the same latitude from the direction of the Fezzan, south of Tripoli, and similarly flanks it, though less closely, up to far beyond Philæ. About eighty miles by river above Cairo, nearly due west of Beni-souef, a deep sinuosity in this chain forms the splendid valley of the Fayoum, which has been justly called the Garden of Egypt. The most fertile tracts of the Delta fall below this specially favoured district, which, abundantly watered by an artificial cut from the Nile, and a complete network of canals, blooms over its whole area of nearly 700 square miles, with the most varied luxuriant vegetation. The Fayoum, in fact, enjoys a pre-eminence as to soil and products over nearly every other part of Egypt. Besides yielding rice and grain in equal abundance with the other provinces, it abounds in dates, flax, cotton, the vine, and almost every variety of fruit. It is also famous for its plantations of roses, the rose-water from which forms one of its chief exports to Cairo and the Levant. In the north-western extremity of this fine province is the large lake called the Birket-el-Korn, thirty-five miles long by five or six broad, which some antiquarians have confounded with the sacred lake Mœris, now dried up, and

the site of which was long doubtful till satisfactorily identified by Linant Bey. The water of the Birket-el-Korn is brackish, and contributes little or nothing to the fertility of the surrounding region. Besides its capital, Medinet—anciently, first Crocodopolis and then Arsinoë—the Fayoum reckons seventy other towns and villages, the whole of which are densely peopled. From this great bend in the Libyan range a caravan route leads westwards to the Little Oasis, and higher up other breaks occur behind Girgheh and Esneh, through which tracks pass to the Oases of Dakhleh and Khargheh; while openings of lesser note afford communication with other fertile spots that dot the depressed region west of the river, and to which allusion will presently be made.

Returning to the Nile, the valley from Beni-souef up to Manfalout forms a tract of great beauty and fertility, thickly studded with towns and villages on both sides of the river. West of Minieh, the thriving capital of an extensive district, a large swamp called the Bathen stretches upwards to Achmounein, which Sicard and D'Anville have on very fanciful grounds sought to identify with Lake Mœris. Thence on, past the rock-tombs of Beni-hassan, the ruins of Antinoë and Hermopolis Magna, and the large village of Mellawee to Manfalout, where Middle Egypt ends, the same uniformity of fertile river bank, varying only in width, continues. A few miles higher up the voyager reaches the flourishing town of Assiout, the capital of Upper Egypt, and the chief *entrepôt* of the caravan trade between Cairo, Darfour, and Sennaar. Above this, the valley narrows into the proportions of a mountain glen, in which at several points the eastern range, especially, presses close upon the stream. In this section of the

country occur, after the Pyramids, its most famous monumental remains—the temple ruins of Abydos, Denderah, Thebes, Esneh, Edfou, Koum-Ombos, and Elephantina—the shattered but still splendid memorials of a dead faith and civilisation with which the world can nowhere else show anything to compare, but further notice of which forms no part of the purpose of this volume. Behind Kenneh, on the eastern bank opposite Denderah, the valley widens into a broad fertile plain, and the Nile here makes its nearest approach to the Red Sea, at a distance of only eighty miles from the little port of Cosseir. Thence upwards, beyond Thebes to Assouan, the cultivable land on either side contracts almost to the river bank; until, above the First Cataract, it vanishes for some distance altogether in the rocky defile through which the river rushes down from Nubia.

Philæ—the Loretto of ancient Egypt—which stands just above the boundary thus reached, has been compared to an emerald set in gold; and this allusion to its luxuriant vegetation, as contrasting with the arid surface of the surrounding desert, is equally applicable to much of the Delta and to the whole of the valley between its apex and Assouan. The Nile is, indeed, everywhere an agreeable object, not so much owing to the majesty of the stream or the variety of its scenery, as to this strong contrast between the freshness and animation of its banks and the desolation that reigns beyond. Nor could any transition be more abrupt: for as sharply as the boundary lines on a surveyor's map, verdure and sand meet exactly where the area of irrigation ends, the highest fertility immediately joining the most desolate sterility in the world. Beyond the Libyan desert, stretches westward to the Fezzan and

southwards into the unexplored wastes of central Africa, —a vast arid plain of gravel or fine drifting sand, with rare tufts of camel-thorn and the dwarf tamarisk for its only vegetation, but peopled nevertheless by several nomad tribes. Eastwards, in the great wilderness between the Nile and the Red Sea, which from the still larger number of its Bedoween population can hardly be called desert, the scene is less dreary, being broken by rugged mountains and numerous ravines, clothed for the most part with scanty verdure. This eastern desert has, besides, the advantage of several springs, and is crossed by caravan routes which in Upper Egypt are still traversed in exactly the same manner as when the "company of merchants" found Joseph in the pit. Mines of various metals and quarries of porphyry and other valuable stones are scattered among the mountainous tracts, and were in part worked so lately as the reign of Mehemet Ali, when the cost of fuel and difficulty of transport led to their abandonment.[1] The aridity of the

[1] Since this was written, Captain Burton, the distinguished traveller, has, at the request of the Khedive, and in company with M. Marie, an able mining engineer in the service of his Highness, partially explored the desert eastern coast of the Gulf of Akabah—the ancient land of Midian—and re-discovered extensive quarries of quartz and chlorite, abounding in rich veins of both gold and silver, with remains of Roman mining works on a large scale, and other traces of a busy population in a region which is, seemingly, still full of mineral wealth. From Makná, the capital of Midian, up to Akabah at the head of the Gulf, Captain Burton reports the country as auriferous, and he believes the district southwards, as far as Jebel Hassäni, to possess the same character. He also found tin and antimony, and washed gold dust out of the streams that run down through the gorges of the granite and porphyry hills which separate the coast from the interior. Should these impressions of Captain Burton be confirmed by the chemical reports on the numerous specimens of deposits he brought away with him, the discovery will be important as well as interesting. In the meantime, the Khedive, who is now fully alive to the fact that all schemes of development in his dominions must be subjected to commercial tests, awaits the result of these assays, and,

lowlands is extreme during nearly half the year, and the heat insupportable even by the Bedoween. Near the sea, a little below lat. 29° N., are the secluded Coptic convents of St. Anthony and St. Paul, from among the monks of the former of which the Patriarch of that sect is now invariably chosen.

Besides the river valley, the Fayoum, and the Delta, thus briefly described, cultivable Egypt includes a number of fertile tracts in the western desert, known as the Oases. In all, five of these

"——— tufted isles
That verdant rise amid the Libyan wilds"

now acknowledge the sovereignty of the Khedive. But the desert that surrounds them offers such formidable difficulties that they have been but seldom visited by modern travellers. They present, however, many interesting features, and, fiscally, are worth 10,000*l.* a year to the Cairo exchequer. They extend almost in a line with the hollow region of the desert, parallel to the general direction of the Nile valley, and within an average distance of about ninety miles from the river. The fertility of the whole is due to the lowness of their soil, which enables them to retain moisture; for they are in reality rather depressions below, than elevations above, the surrounding sand. The most southern is the Great Oasis, called from its chief town the Wah-el-Khârgeh, which lies nearly due west of Thebes (lat. 25° 43′ N.), and has a length of about 200 miles by nearly twenty broad. Fifty miles west of the extremity of this lies the Wah-el-Dakhleh, twenty-four miles long by ten broad, whose first European visitor was Sir

should they be favourable, will probably invite European capitalists to re-open and work this Arabian El Dorado—as Captain Burton confidently affirms it to be.

A. Edmonstone, in 1819. Seventy miles farther north is the small oasis of Farâfeh, famous in Egypt for its olives; and next beyond it, in the parallel of Minieh (lat. 28° 4′ N.), rise the date groves of the Wah-el-Behnesa, or Little Oasis, a rock-bound valley twelve miles long by about six broad, of which the Wah-el-Hayz, a day's journey south, is regarded as a continuation. West of this latter is the Wah-el-Zeroora, or Oasis of the Blacks, which is, however, rather one of a series extending westwards, than properly a member of the Egyptian group. And lastly, away beyond the Fayoum, nearly 150 miles from the Nile, lies the Wah-el-Siwah, or Oasis of Ammon, historically famous as the site of the great Jovian temple and oracle whose priests proclaimed Alexander's sonship to the god, and foretold his mastery of the world. The ruins of the temple may still be traced, and the oasis, which is about nine miles long by three broad, is otherwise rich in archæological remains. Although tributary to Egypt, the inhabitants of this secluded spot are in language and manners wholly Libyan. The region of the Oases terminates northwards in the Wady-Natroon, or desert of the Natron Lakes, so called from a series of eight rock-walled basins, whose banks and waters are covered with crystallisations consisting of muriate of soda or sea-salt, and of natron or sub-carbonate of soda, known in commerce under the name of *trona*. This desolate tract contains four Coptic monasteries, the remains of the once famous anchorite settlement of Nitria. Parallel to, and separated from it only by a line of slightly elevated ground, runs the Bahr-bela-ma,[1] or "waterless river," a long depression at several points below the level of the Nile, and which, having been traced from the

[1] Called also the *Bahr-el-Fargh.*

Mediterranean, through the desert west of the Fayoum up to near the Wah-el-Dakhleh, is by some thought to be the dry bed of a branch of the river that once passed in this direction and entered the sea westwards of Alexandria. These Oases are, however, rather insular dependencies than integral parts of Egypt proper, although they lie well within the imaginary line of its western frontier.

About the Red Sea coast a word or two will suffice. From a little south of Suez down to near Massowah, a broken mountain chain flanks the shore at a nearly uniform distance of from ten to twelve miles, the chief passes through which are those leading from Cosseir to Kenneh and Coft, and from Souakim to Taka and Berber. In lat. 27° 24′ N., Abou-sar-el-kibls, a small walled town, almost wholly without trade, occupies the site of Myos Hormos—in the time of Strabo the chief port of the Red Sea. Nearly a degree of latitude farther south stood old Cosseir, the Leucos Portus of Ptolemy, which has long since given place to the modern town of the same name, five miles lower down. At the top of a deep gulf behind Cape Benas, in the parallel of Philæ, are the ruins of Berenice, which during the Roman occupation of Egypt eclipsed Myos Hormos and became the chief emporium of their eastern trade. Thence to Souakim, in lat. 19° 48′ N., no other practicable port occurs, nor below this again till Massowah is reached, in latitude 15° 44′. This, as yet, forms the most southern Egyptian station on the Red Sea, though sovereignty is claimed over the whole down to the Straits of Bab-el-Mandeb, outside which the ports of Zeyla and Berbera,[1] on the Indian

[1] Zeyla was obtained a couple of years ago by cession from the Porte, which claimed a shadowy sovereignty over the local chief, and Berbera

Ocean, have been occupied, and foothold has thus been gained in the Galla and Somauli countries, of which the fine district of Harar, in the former, has already acknowledged the sovereignty of the Khedive. The Red Sea coast is at various points skirted by groups of islands, but these, like the belt of mainland between the mountains and the sea, are barren and for the most part uninhabited.

While the country outside the river valley and the Delta is thus diversified, three distinct geological regions occur between Philæ and the Mediterranean. The most southern of these is *granite*, which extends from the sacred island through the cataract to Assouan, and affords also *syenite* and some other crystalline primitive rocks, remarkable for their durability and capability of polish. From these rocks were quarried the colossal statues, pillars, and other monoliths which figure prominently among the monumental wonders of Egypt. Next to this comes the *sandstone* region, extending from Assouan to Esneh, and yielding a stone which, though soft and easily worked, is also very durable, as may be seen from the still magnificent sphinx-avenues and palace-temples of Thebes, which are built chiefly of this stone. From Esneh northwards the formation is *limestone*, the chief material of the Pyramids, which below Cairo disappears in the deep alluvium of the Delta, to

by the simple and less expensive process of landing a small force on the spot. This latter station is the scene of a great annual fair, held between October and April, for the caravans from the interior, and during half the year carries on a considerable trade—mostly in the hands of the Banyan merchants—with the opposite coast. Hitherto, the want of water has been the great obstacle to the permanent occupation and development and growth of this settlement, but in 1876 a complete service of iron pipes was carried from the town to some fine springs six or seven miles off in the hills, and the water-supply is now abundant. There are said to be extensive coal beds near Zeyla, but both it and Berbera are chiefly valuable as *points de départ* for further annexations.

crop up again in a ridge on the coast, extending from Alexandria to near Aboukir. The soil both of the Delta and the entire Nile Valley is the direct creation of the river, whose mud deposit has in the course of unmeasured ages reclaimed the valley from the desert, and the Delta from the sea; and as the operation still goes on, the result is the continuing elevation of both the river-bed and the land on either side as far as the annual overflow extends. This increase of soil is estimated to proceed in Upper Egypt at the rate of about five inches in a century; but in the Delta, where the flooded area is greater, it takes place more slowly. The scientific staff which accompanied the French expedition of 1798, and collected the materials for the magnificent *Description de l'Egypte* since published by the French Government, made numerous experiments to ascertain the depth of the alluvial matter thus deposited. By sinking pits at various intervals, both on the banks of the river and on the outer edge of the stratum, they found (1) that the surface of the soil declines from the margin of the stream towards the foot of the hills; (2) that the thickness of the deposit averages ten feet near the river, and decreases gradually as it recedes; and (3) that beneath the mud there is a bed of sand analogous to the substance brought down by the river when in flood. An analysis of the soil thus formed gives nearly one-half of argillaceous earth, with about one-quarter of carbonate of lime, the remainder consisting of water, oxide of iron, and carbonate of magnesia. On the very river banks the slime is mixed with much sand, which it loses in proportion as it is carried further from the river, until at a certain distance it becomes nearly a pure marl, which, besides being employed largely in the manufacture of bricks, pottery ware, and pipes, serves as

a sufficient manure for the adjoining land beyond th actual limit of the annual flood.[1]

Such are the main divisions and chief natural features of Egypt proper. With the boundary line of the First Cataract a distinct country, or rather series of countries, begins. Of this, the first long link from Philæ to Dongola still retains its old name of NUBIA, and, like the lower valley, consists of little more than the narrow margin of arable land watered by the river, which nowhere exceeds four miles, and at several points disappears altogether. Eastwards this fertile strip is bounded by the desert to the Red Sea at Souakim, its only practicable port, and westwards by a continuation of the same Libyan wilderness that flanks Egypt proper lower down. A difference of language and tribal population divides it into two parts—the Wady Kenoos and the Wady Nouba, the first of which extends from Assouan to Leboua, and

[1] It may be worth while here to quote the lively and still faithful picture of rural Egypt up to this point, given by Amrou, its Saracen conqueror, in his answer to the Caliph Omar, as recorded by Gibbon:—"O Commander of the Faithful, Egypt is a compound of black earth and green plants, between a pulverised mountain and a red sand. The distance from Syene to the sea is a month's journey for a horseman. Along the valley descends a river, on which the blessing of the Most High reposes both in the evening and morning, and which rises and falls with the revolutions of the sun and moon. When the annual dispensation of Providence unlocks the springs and fountains that nourish the earth, the Nile rolls his swelling and sounding waters through the realm of Egypt; the fields are overspread by the salutary flood, and the villages communicate with each other in their painted barks. The retreat of the inundation deposits a fertilising mud for the reception of the various seeds; the crowds of husbandmen who blacken the land may be compared to a swarm of industrious ants, and their native indolence is quickened by the lash of the taskmaster, and the promise of the flowers and fruits of a plentiful increase. Their hope is seldom deceived; but the riches which they extract from the wheat, the barley, and the rice, the legumes, the fruit-trees, and the cattle, are unequally shared between those who labour and those who possess. According to the vicissitudes of the seasons, the face of the country is adorned with a *silver* wave, a verdant *emerald*, and the deep yellow of a *golden* harvest."

the second thence to Dongola; but the physical aspect of the two districts is nearly identical. In both the river valley is lined for the greater part by sandstone and granite hills, which here, as below, at several points closely approach the stream, and nowhere up to Wady Halfa (lat. 22° N.) does cultivation range much beyond the river banks. At this point the Second Cataract begins and extends through the Dar-el-Hadjar in a series of swift rapids for nearly one hundred miles, to Sukkoot, where the valley widens and the prevailing sterility of the lower basin disappears. Fine fertile plains stretch out on both sides of the river, which here also encloses islands of considerable extent, and for the most part well cultivated. Owing to the height of its banks, the Nile in this region seldom or never overflows, and artificial irrigation is almost everywhere necessary. This now, as before Candace, is still effected by means of the old cumbrous *sakkias*, or Persian water-wheels, which throughout Nubia do the work of the pole-and-bucket *shadoof* more generally employed by the Egyptian fellaheen. Up through the district of Mahass to above the Third Cataract the range of cultivation continues wide, but it contracts again above the long and beautiful island of Argo, a few miles south of which, at Ordee, or New Dongola, in lat. 18° N., Nubia proper terminates and the *Beled-es-Soudan*, or Country of the Blacks, begins.

In a separate chapter some description will be given of this latter group of countries, and of the administrative revolution which is now being carried out in them by Gordon Pasha. It need only, therefore, be here said that, as the official geography of Cairo now claims, they extend a thousand miles farther south, eastwards to the Red Sea and the Indian Ocean, and westwards beyond Darfour. Excluding, for the present, Abyssinia

and the Galla and Somauli countries, which are already overlapped by these successive annexations, the "Greater Egypt" thus formed comprises the vast slice of eastern Africa from the Mediterranean to the Victoria Nyanza, and thence along the Equator to the frontier of Zanzibar —a territory more than five times larger than that ruled by the Pharaohs, the Ptolemies, the Antonines, and the Caliphs. For the present, however, the southern limit of the Khedive's dominion may, as before remarked, be struck for all administrative purposes, at Gondokoro, in the parallel of Fazoglou. From this point to the Mediterranean stretch more than twenty-three degrees of latitude, which, with an average width of 350 miles, cover a surface more than twice that of France, or even of Austria. Three-fourths of this may be desert, but there still remains an aggregate of cultivable areas larger than united Italy. The French survey of 1798 computed the total surface of Egypt proper to be 20,000 square leagues, or 115,200 square miles, but of this only 9,582 square miles (including the Nile bed and the islands within it, together representing 294,217 acres) were then watered by the river. Since then, however, improved irrigation has extended the cultivable face of the country below Assouan to 11,351 square miles—equal to 7,264,640 acres—of which 4,625,000 are now actually under tillage. No similar survey has been made of Nubia and the Soudan, but their total cultivable surface may be roughly estimated at above 150,000 square miles; or, in round numbers, from the Mediterranean to the latitude of Fazoglou more than 160,000 square miles of arable soil, abundantly peopled, and needing only good government and industrial development to be welded into a homogeneous and powerful State.

CHAPTER II.

POPULATION.

Diversity of Races—Conflicting Estimates of Total—Census of 1859—Rate of Increase — Present Estimated Totals — Fellaheen — Bedoween — Copts — Abyssinians — Nubians — Jews — Rayah Greeks — Syrians — Armenians — Foreigners—Industrial Distributions of the Whole.

WHATEVER may have been the origin of the ancient Egyptians—whether Semitic or Aryan, as ethnologists much dispute—their modern successors are many-raced, and no two estimates of their number agree. Arabs, Copts, Turks, Nubians, Greeks, Jews, Armenians, and Levantines of every shade of mixed Eastern and European blood, they have been variously computed at from 1,500,000 by Sir Gardiner Wilkinson, to 5,250,000 by the latest official Egyptian returns.[1] But when the former of these estimates was made no trustworthy statistics existed; and it can only therefore be regarded as the random guess of an otherwise well-informed observer, based on assumptions which later investigation has shown to be incorrect. So, too, with Mr. Lane's reckoning of less than 2,000,000 made nearly fifty years ago;[2] not only did that exclude the Arab tribes on both sides of the Nile, who, although nomad, pay regular taxes to the Government and otherwise acknowledge its authority, but it considerably reduced the totals of the various settled communities as estimated by their respective

[1] *Statistique de l'Egypte*, 1873. [2] *Modern Egyptians*, i. 32.

chiefs. A few years later, M. Mengin, a French historian of the reign of Mehemet Ali, computed the whole at nearly 2,900,000; but although his estimate had the advantage of being based on an official return of the number of houses throughout the country, he demonstrably under-numbered the quota of heads per house in all the chief towns of Lower Egypt, besides repeating Mr. Lane's omission of the entire nomad population. Strabo and Diodorus, reasoning from the cultivable area of the country, its extreme fertility, the great fecundity of Egyptian women, and the evidently vast amount of disposable labour, reckoned the population under the Pharaohs at between 6,000,000 and 7,000,000, and modern criticism has accepted the estimate as proximately exact. Clot Bey, writing in 1840 with all the materials for a judgment up to that date before him, reckoned the decadence since the Persian conquest at about one-half, leaving a then total of between 3,000,000 and 4,000,000.[1] But making full allowances for the waste of life consequent on the many revolutions through which the country has passed, and for the more modern losses occasioned by the internecine feuds of the Mamlouks and the campaigns of Mehemet Ali, there is still reason to believe that, even thirty-seven years ago, the total population exceeded the larger of these estimates. A rough census taken in 1859, during the viceroyalty of Saïd Pasha, returned the whole inhabitants of Egypt proper at 5,125,000; and allowing for even a considerable margin of error in that computation, there would still remain nearly 5,000,000 as the population strength of the country three years before the accession of the present Khedive. Since then the cholera epidemic of

[1] *Aperçu Général sur l'Egypte*, i. 166.

1865 and the typhus pest that followed it swept away about 100,000, but the steady and increasing excess of births over deaths has much more than recouped the loss thus occasioned. The latest official returns show that, while this gain of life over death averaged annually 33,470 during the ten years ending 1861, it had, through better sanitary administration and general improvement in the material condition of the country, risen in the five following years to 46,902, and in 1867–71 to 63,296—a rate of increase, as compared with Europe, which is inferior only to that of Great Britain, Prussia, Russia, and Sweden during the corresponding period, and which if continued, would double the existing population in less than sixty years.[1] It is evident, therefore, that if the census returns of 1859 were even approximately accurate, the present inhabitants of Egypt proper must number rather over than under 5,500,000. Of Nubia and the Upper Nile countries only the very roughest estimate can be formed, on a mean of the conjectures of various travellers, from Bruce and Burckhardt to Baker and Nachtigal, which would give for the whole another 10,000,000 or 11,000,000. But although these southern provinces will undoubtedly form important factors in the future of Egyptian politics, their present economical value is small as compared with the territory below Philæ, and no more precise estimate of either the number or ethnological distributions of their inhabitants need, therefore, be here attempted.

No official classification of the population of Egypt

[1] Although the collection of accurate statistics is as yet very imperfectly organised in Egypt, in the matter of births and deaths the registration is very careful, and these figures—quoted from the periodical return made to the Defter-khana (State Archive Department)—may be accepted as sufficiently exact.

proper has been published, but the following is believed to be approximately correct:

Settled Arabs (fellaheen)	4,500,000
Bedoween	300,000
Turks	10,000
Copts	500,000[1]
Abyssinians	3,000
Nubians and Soudanis (mostly slaves)	40,000
Jews	20,000
Rayah Greeks	20,000
Syrians	7,000
Armenians	10,000
Various foreigners	90,000
Total, about	5,500,000

Of the dozen or more elements which thus constitute the present motley population of the country, the settled *Arabs*, who form four-fifths of the whole, although one in creed, are nearly as diverse in race as the minor communities which complete the tale. Two-thirds of them may be set down as descendants of the Copts who embraced Islam after the Arab conquest (A.D. 640), or who have since apostatised, and by intermarriage have long ago fused with their conquerors and with the Moslem immigration from east and west. The actual army of Amrou was small, and, though mostly of pure Arabian blood from the neighbourhood of Medina, would have been swamped in this great conversion but for the influx of whole tribes of other Arabs from the Hedjaz, from Mauritania, and the coasts, who gradually mixed with and more or less assimilated the ex-Coptic element in the districts where they settled, and together formed the great labouring class of the fellaheen. These immigrants

[1] This estimate is based on a statement made to the writer by the Coptic Bishop of Cairo.

did not, however, completely amalgamate among themselves, and even yet the much finer physique of the fellahs of Lower and Middle Egypt—the Arab element in whom descends mostly from the tribes that came originally from beyond the Red Sea—distinguishes them clearly from the Moorish Moghrebees of the Saïd. Amongst the town populations the distinction of tribes has been almost wholly lost, but traces of it are to be met with in the remoter villages, where many old customs of their desert ancestry still survive. Physically, the fellaheen—with the distinction noted in favour of Lower as compared with Upper Egypt—are a fine muscular race, the average height of the men being from five feet eight to five feet nine inches, and that of the women in proportion. Under nine or ten years of age, most of the children have very spare limbs and distended abdomens, but as they grow up their forms rapidly improve, and in full age the majority, as a rule, become remarkably well-proportioned—with fine oval faces, bright deep-set black eyes, straight thick noses, large but well-formed mouths, full lips, beautiful teeth, broad shoulders, and well-shaped limbs. From twelve—the usual age of marriage—to eighteen or nineteen, nearly all the women are splendidly formed, and many of them are of real beauty; but once past their 'teens they rapidly wither, and as a rule are little better than wrinkled hags before thirty—a fact on which a recent writer is liberal and philosophical enough to base a strong apology for polygamy.[1] In Cairo and throughout the larger towns of the Delta, those who have not been much exposed to the sun have a clear olive complexion and a very delicate skin, but the less sheltered villagers are of a more bronzed and coarser hue. In Middle Egypt the colour is still

[1] *Egypt of the Pharaohs and of the Khedive*, pp. 323, 324.

darker, and in the Saïd it deepens, towards the Nubian frontier, to the tint of a Barbadienne bronze. Time and dynastic revolutions have wrought but little change in either the condition or character of this great mass of the Egyptian population. As they were under the Pharaohs, the Ptolemies, the Romans, and the Caliphs, so in the main are they now—the most patient, the most pacific, the most home-loving, and withal the merriest race in the world. In this latter respect the oppression of more than forty centuries has failed to damp their natural buoyancy of spirit; and nowhere more than amid the mud huts and seemingly abject poverty of a fellah village does "the human heart vindicate its strong right to be glad." The men are temperate and honest, but the women, if not quite meriting Lane's harsh judgment that they are "the most licentious of all females who lay claim to be considered as members of a civilised nation," have at least long lost the robust virtue of the Bedoweeyeh, and as a class, while physically the finest, are said to be ethically the frailest of their sex in the Nile Valley. It is the fashion to write and speak of this large section of the Khedive's subjects as being intolerably oppressed, ground down by crushing taxation, and generally wretched beyond any parallel elsewhere. This exaggeration has, no doubt, its origin mainly in the superficial impressions of strangers, who, coming fresh from Europe—where, in a different civilisation, a totally different standard of peasant life prevails—discover in the scant clothing, the simple food, and the primitive huts of these Egyptian ryots evidences of altogether special misery and administrative abuse. But no inferences could well be more fallacious. Apart from the fact that these external features accord with the climate, and have been stereotyped since before the

Pyramids were built, it may be affirmed that the general condition of the fellaheen will compare favourably with that of almost any other peasantry in the East. If economical facts prove anything at all, the vast increase in the agricultural and other exports of the past dozen years, and the nearly corresponding return outlay on European manufactured goods, demonstrate a measure of material improvement among the producing classes which may be vainly sought for elsewhere out of Europe. That the taxation is heavy — but not oppressive—is admitted; and that, until lately, the methods of its collection have been often brutal may also be conceded. But, apart from the traditional cruelty of tax-gathering all the East over, the Egyptian peasant has been noted in all time, from Cheops to Ismaïl, for his unwillingness to pay taxes at all. It is, in fact, a point of honour to bear any amount of "stick," if by so doing the impost, or any part of it, can be evaded. The fellah, indeed, who will not do so is despised by even his own wife as a poltroon, and if, after only a dozen or score of blows, he disgorges the coin which endurance of fifty might perhaps have saved, the conjugal estimate of his spirit is shared generally by his fellows. Hence a difficulty of no trifling importance in the way of the new financial administration. Those who know Egypt best believe that nothing short of "stick logic" will, as a rule, persuade a fellah to pay his dues, be they ever so equitable; and if Mr. Romaine and his colleagues will not use it, the chances are much against the revenue.

But a much wider line than that which marks the difference of origin between the two sections of the settled Arab population separates both from the *Bedoween*, who represent those of the original immigration who

retained their old nomad habits and, with them, much of the proud independence that distinguishes the race everywhere from Barbary to Oman. These number in all some sixty tribes, roughly estimated at about 300,000 strong, the whole of whom, since the vigorous action taken against them by Mehemet Ali, are in complete subjection to the Government, and the desert on both sides of the Nile is now as safe for caravans or even private travellers as are the streets of Alexandria and Cairo. The most powerful tribes are the Ababdehs and Bisharis, who claim patrimonial rights over the great eastern wilderness south of the parallel of Cosseir, far up into Nubia; the Henadi or Henadouehs, whose territory extends northwards to the latitude of Beni-souef; the Mehaz, the Serrâbria, and the Quattâb, thence down to Cairo; and the Halaybis and Beni-Ali, who divide between them the desert east of the Delta to the Syrian frontier. Across the Gulf of Suez, the Tor Arabs of Sinai are probably the friendly tribe, miscalled Midianites, who guided Moses as far as Ezion Geber on the Gulf of Akabah; and, beyond them, the Alawin—the hostile Edomites who refused him passage through their country and compelled the long *détour* round the east side of Mount Hor. But these, too, are now as obedient to the Government of Cairo as their fellow-nomads in Egypt proper, and where the Israelites were turned back Cook's and Gaze's tourists pass safely on payment of a trifling *backsheesh* to the local sheikh. Few or none of these tribes are stationary, except on the skirts of the wilderness, where they pass some months of the year on the green spots with their flocks and herds, cultivating patches of grain-land, and visiting the neighbouring towns for the purposes of traffic. The latest published returns of the movements of these nomads

states the number of those who thus camped during the year on the border of the settled districts at 40,000, of whom above 19,000 visited the province of Esneh, and nearly 6,000 the Fayoum. For convenience of pasturage, each tribe is broken into subdivisions of from forty to one hundred tents, governed by minor sheikhs, chosen from amongst the heads of families, who in turn choose the supreme chief of the tribe, whose authority, though practically hereditary, is still in theory elective. These Bedoween consider themselves the aristocracy of the race, and rigidly abstain from intermarriage with the settled inhabitants, whom they regard as degraded, and contemptuously call the "dwellers among brick."

The introduction of the *Turkish* element into Egypt dates from the Ottoman conquest, in 1517, when Sultan Selim dethroned the last of the Mamlouk Borghite dynasty, usurped the title of "Caliph," and nominally reduced the country to the rank of an Ottoman province. But the change was followed by only a small immigration of the conquerors, who settled chiefly in Cairo, and neither then nor subsequently did these fuse with the native Moslem races. For nearly two hundred and forty years they monopolised most of the chief posts in the administration, but without exercising much real authority in the country. But towards the middle of last century the Mamlouks—who in the meantime had remained a distinct and strictly warlike caste, kept up and recruited by the white-slave trade with the Caucasus—had regained most of their old ascendency, and during the next fifty years the resident Turkish colony not only lost nearly all share in the government, but the sovereignty of the Sultan over Egypt was virtually extinguished. Nor was the position of this Ottoman aristocracy at all retrieved by the revolution affected by Mehemet Ali,

who, only half a Turk himself, had few sympathies with it. His obvious aim, too, being to re-found an Arab empire, his policy was to employ rather the native Egyptian than the Osmanli element in both the military and civil services; and whether or not his successors have inherited his ambition, they have at least followed the same rule. Just as Arabic has become the official as well as vernacular language of the country, so Egyptians have supplanted Turks in almost every branch of the administration, which in a few years bids fair to be wholly in Arab and Coptic hands. With some few official exceptions, the existing Turkish colony—of whom about 5,000 are settled in Cairo, 2,000 in Alexandria, and 3,000 are scattered throughout Upper and Lower Egypt—consists mainly of artisans, shopkeepers, small proprietors, and members of the Ulema, of good position in their respective classes, but of little either social or political influence outside.

The free *Nubians* are chiefly Barabras (or Berbers), who, though nominally Moslems, can be classed with neither the Arabs nor Turks. They belong to a tribe between the First and Second Cataracts, large numbers of whom migrate down into Egypt, chiefly to Cairo—as the Auvergnats and Savoyards do to Paris—to earn money in domestic service, and then return to their villages comparatively rich with the fruits of their ten, fifteen, or twenty years' savings. They have an especial repute for honesty, and serve Moslem and Christian masters with equal zeal and fidelity.

Next in order of number to these Mohammedan elements, but before them in historical interest, stand the *Copts*, who are not only the most ancient, but strictly speaking the only native Egyptian race. In spite of Volney and Champollion, ethnologists are now generally

agreed in regarding them as the descendants of the Pharaonic Egyptians, mixed more or less with the Persians left by Cambyses and the Greeks who followed the standard of Alexander, but still visibly preserving the characteristics of the old-world race that built Thebes and worshipped Amoun-ra. To a portion, at least, of the Arab population, which now so far outnumbers them, they bear a similar relation to that of the Gauls to the Franks under the Merovingian Kings; but unlike these, the victors and the vanquished in Egypt never completely blended into one national whole. A majority of the native race embraced the creed of their conquerors, and in time amalgamated with them by intermarriage; but a large remnant adhered to the older faith, and, preserving jealously all their special features of race and religion, have remained till the present as distinguishable from the surrounding communities as they were two thousand years ago. The etymology of their name has been disputed, but the weight of authority inclines to regard it as the middle syllable of the word *Ægyptius*,[1] the oldest name of the Nile (anciently written *Ægoptios*), and their proper language is similarly accepted as the aboriginal tongue. It had some affinity to Hebrew and Ethiopic, but before passing from popular use in the tenth century, it had become largely mixed with Greek and Arabic terms. It now survives only in the church services, in which few even of the priests understand what they read. Though crossed with both Persian and Greek blood, in form and feature these Christian Copts still closely resemble the sculptured presentments of the original race which abound everywhere in tomb and temple from Beni-hassan to Philæ. The

[1] Another derivation is from Coptos (now Coft) in Upper Egypt, which was the head-quarters of the Christians till the Arab conquest.

theory of Volney that they are of negro origin has been refuted by the minute anatomical investigations of Baron Larrey, chief of the medical staff of the French expedition, who adopted the view of Herodotus, that they are a cross of the Nubians with the Abyssinians—their skins being of a dusky yellow colour, darker than the Arabs; their countenance full without being puffed; their eyes large, black, and elongated; the nose almost straight and rounded at the tip; the nostril dilated; the mouth middle-sized; the lips thick, but not thrown back like those of the negro; and the beard and hair black and bushy, but not at all woolly. They are, too, in contrast to the Fellaheen, generally under the middle size, as were —to judge from the mummies—the ancient Egyptians. In character, like all long degraded classes of men, they are mean, crafty, avaricious, and immoral; wholly lacking both the self-respecting pride of the Turk and the manly frankness of the Arab. In religion they are Monophysites of the Jacobite sect—pronounced heretical by the Council of Chalcedon in A.D. 581—and claim St. Mark as the founder of their church. Their clergy—whose educational status is perhaps now lower than that of any other Christian priesthood in the East—consist of a Patriarch, who takes his title from Alexandria but resides in Cairo, of twelve bishops and an indefinite number of arch-priests, priests, deacons, and monks. The Patriarch is chosen from the monks of St. Anthony—one of two monasteries belonging to the sect in the eastern desert between Benisouef and the Gulf of Suez—a mode of election which, as Mr. Curzon remarks, ensures his entire ignorance of all sublunary affairs, and his consequent unfitness for his high office, unless he chance to be a man of very uncommon talent. He appoints the Aboona, or metropolitan, of Abyssinia—the "Christianity" of which is also

Coptic—and, besides absolute ecclesiastical authority, wields extensive civil jurisdiction over both the clergy and laity of his own communion. The twelve bishops are also chosen from the monks, and, like the Patriarch, cannot marry: for the priests and deacons, on the contrary, marriage is a condition of ordination, but in the event of their wives dying, they may not marry a second time. Of all Eastern Christians the Copts are perhaps the most bigoted and intolerant, carrying their peculiar tenet to the length of regarding all other churches as polytheistic, and so refusing any approach to fellowship with Latin, Greek, and Protestant alike. They practise polygamy, and the rite of circumcision on *both* sexes, as also auricular confession, frequent and rigid fasts, and some other observances common to both the Eastern and Western churches. At Cairo an energetic Jesuit mission has succeeded in making seven or eight thousand converts to Roman Catholicism, and it is but fair to say that these form the most civilised and progressive section of the Coptic population. At the same time, the social condition of the Copts generally is much improved since Gibbon described them as "a race of illiterate beggars, whose only consolation is derived from the superior wretchedness of the Greek Patriarch and his congregation." Mehemet Ali relieved them from many humiliating disabilities, and the same liberal policy has been carried still further by his successors. Several of the sect have from time to time been promoted to the rank of Bey, and the singular aptitude of nearly all the males for account-keeping and subordinate administration has long led to their extensive employment in Government offices and in the management of estates owned by the wealthier Arab and Turkish proprietors. In retail trade and skilled labour they compete successfully with the Jews, Syrians,

and rayah Greeks, who otherwise monopolise most of the handicrafts and petty commerce of the country; and in Upper Egypt, where the sect is most numerous, they cultivate their fields and date-palms under the same fiscal conditions as the ordinary fellaheen. The inhabitants of Nubia also belonged to the Coptic communion until about the twelfth century, when they embraced Islam almost *en masse*.

Of the other smaller Christian communities, the *Abyssinians* most nearly resemble the aboriginal race. Nominally identical in creed and ritual, they have also many physical traits in common with the Copts. Their features are more regular, but—except in the case of those from the borders of the Galla country, who closely approximate to the negro—their colour and hair are similar, and both are alike slim and small-boned. As most of the Abyssinians in Egypt have been imported as slaves, the women are in great majority, and many of these are remarkable for their splendidly lustrous eyes, their finely-cut features, and general elegance of figure and carriage. In all but the very wealthiest households these dusky beauties of Habesh have superseded the fair-skinned but costlier houris of Georgia and Circassia; but the trade in both is now contraband, and in a few years they may be expected to count for little in any census returns. It may be remarked that the Abyssinian slaves of both sexes—the males are mostly eunuchs—generally follow the common example of their class on reaching Cairo, and embrace the dominant creed. Only the few of their free countrymen who come north for trading or other purposes can, consequently, be claimed as within the pale of Egyptian Christianity.

The rayah *Greeks* pride themselves on being the

descendants of the ancient Greek colonists; but, in the matter of religion, this community of origin has not prevented their splitting into two sects. Of these, the more numerous belongs to the "Orthodox" communion of Constantinople, and receives its Patriarch from the Fanàr; while the other, though still retaining the dogmas and ritual of the mother church, has, like the Catholic Armenians of Turkey, accepted the spiritual headship of the Pope. To this sub-sect are affiliated most of the Syrians domiciled in Egypt, who being chiefly Maronites, stand in a similar situation to Rome; Arabic, too, is the common vernacular of the whole.

The *Armenians* in Egypt nearly all belong to the "United" communion, and, except in here speaking Arabic, they differ little in character or social habits from their co-religionists of the same rite in Turkey. They are however ecclesiastically independent of Constantinople, having their own Patriarch and episcopate; but their relations with the Balata hierarchy are still intimate and cordial. The few "Catholic" Armenians in Cairo and Lower Egypt differ from their compatriots of this "nation" only in the point of spiritual allegiance to Rome; and as this in their case is rather Gallican than Ultramontane, its chief if, not only, outward effect is seen in the Frankish dress of their women. In all else both sections of this community are, here as in Turkey, as Semitic as the lost Ten Tribes, from whom some ethnologists not unplausibly derive their descent.

Last, and socially lowest in the census-roll of the Khedive's non-Moslem subjects stand the *Jews*, most of whom still occupy a special "quarter" in Cairo, as dirty and as isolated as the old Ghetto at Rome. Until the reign of Mehemet Ali they were the pariahs of Egypt, oppressed and plundered by the dominant class far beyond

the worst experience of the Christians, and treated with ignominy by all. The even-handed tolerance of the old reformer much improved their condition, and at present they are more effectively protected by the Egyptian Government than in any other part of the Levant. But forty years' humane treatment has as yet done little to morally improve or socially elevate the victims of so long a degradation; and the Jews of Egypt are, therefore, perhaps the lowest types of their race in the East. They are dirty, greedy, and bigoted beyond the average of their fellows elsewhere, and in return for their fanaticism they are still despised, and when possible abused, by both their Moslem and Christian fellow-subjects. A few of them have risen to the foremost rank among local bankers and in the wholesale trade; but the great majority are petty money-changers, subordinate clerks in Government and merchants' offices, and handicraftsmen in the lighter skilled trades. About 2,000 are Caraites, who adhere to the strict letter of the Old Testament, and the remainder Rabbinists, who follow the traditions of the Talmud. Physically, by strict abstinence from intermarriage with other races, they have preserved the peculiar features of the pure Eastern Jew—the fair complexion, the blue or grey eye, and the light chestnut beard and hair which differ so markedly from the heavy Armenian physiognomy of most of their co-religionists in Western Europe; but owing to the use of a gross diet, of which sesame oil forms a large ingredient, they have a flabby, unhealthy look, that still further distinguishes them from both the Arab and the Christian population.

Of the 90,000 or more *Foreigners* domiciled in Egypt, the large majority are Roman Catholics and Greeks, of whom it is no libel to say that a minority at least are the very dregs of the Levant. Of the gross total about

25,000 reside in Cairo, and 50,000 in Alexandria, the remainder being distributed along the Isthmus and among the other principal towns of Middle and Lower Egypt. More than nine-tenths of these foreign colonies—as they are locally called—have settled in the country since the reign of Mehemet Ali, who offered every encouragement to the immigration; and the latest official returns show a steady annual increase in their numbers. These are now respectively reckoned at—40,000 Greeks, 15,000 French, 16,000 Italians, 7,000 British, 7,000 Austro-Hungarians, 1,500 Germans, and 4,000 of other various nationalities. Under the anomalous *régime* of the Capitulations, these foreign communities have hitherto been wholly independent of the native authorities, each being governed exclusively by its own Consul, with the result of there being some sixteen alien jurisdictions in the country, all more or less antagonistic to each other and to the native tribunals. The mischief worked by such a system may be conceived; but a reform introduced last year, and the details of which will be explained in a subsequent chapter, has already done much to remedy many of the resultant abuses, and to bring this section of the population into juster relation to the Government. Most of the foreign trade and banking business of the country is in the hands of this class, to which also belong the wealthiest retail dealers and best paid artisans in both Alexandria and Cairo.

The present population of Egypt proper is thus composed of elements as various as the castes of India, and is engaged in occupations as separate as the races themselves are distinct. The agriculture of the country is mainly in the hands of the Moslem fellaheen, its

account-keeping in those of the Copts, the Turks are for the most part proprietors and officials, the Negroes domestic servants, and the Levantines and Europeans, in their multitudinous varieties, traders, shopkeepers, and dealers in money. Estimating the whole at 5,500,000, we have about 484 inhabitants per square mile of its cultivable area; or, in other words, in ratio of population to arable surface Egypt ranks before Belgium, the most densely-peopled State of Europe.

CHAPTER III.

CITIES AND TOWNS.

Cities and "Mohafzas"—Towns and Villages—Alexandria—First View of Egypt—Napoleon's Estimate of Alexandria—The Old Civilisation and the New—Topography of the Modern City—Its Commercial Revival—Ramleh—To Cairo—The Queen of Eastern Cities—Hausmannisation—The Esbekieh—Cairene Mosques—The Citadel—Social Attractions—Heliopolis—The Pyramids and Sphinx—"Eothen's" Prophetic Rhapsody—The Nile Voyage—Cairene Trade—Helwân—Rosetta—Damietta—Port Saïd—El-Arish and Ismaïlia—Suez—Souakim and Massôwah—The other Provincial Chief Towns.

ALTHOUGH eight Egyptian towns are officially classed as "cities," and form distinct governments (*mohafzas*) apart from the provinces to which they geographically belong, only two—Cairo and Alexandria—can be strictly called so in our European sense. The other six[1] do not properly rise above the rank of towns, while of the 113 to which this secondary grade is given, many differ but little from the larger of the 3,339 villages scattered throughout Egypt proper. In size, population, and importance, the capital and its great sea-port stand alone, even the smaller of them far exceeding in all three of these respects the whole half-dozen of its administrative compeers grouped together.

The latter—Alexandria—it is that usually forms the stranger's first glimpse of the land of Egypt, for so low is the long alluvial coast-line from the Arab's Tower to Aboukir, that hardly has it risen above the azure sea before the Pharos lighthouse, Pompey's Pillar, Forts Napoleon and Cafferelli, the antiquated windmills, the white palace of Ras-el-Teen, a score of minarets and factory chim-

[1] Rosetta, Damietta, Port Saïd, El-Arish, Ismaïlia, and Suez.

neys, clumps of feathery palms, and a forest of shipping come full into view, and in little more than half an hour you round the great breakwater and are in Egypt—if not, as yet, of the Pharaohs and the Ptolemies, at least of the Caliphs and the Khedive. The motley scene that meets the eye on landing suggests at once the transition that is in progress from the semi-barbarism of the East to the civilisation of the West; and in its sharp contrasts of Oriental and European, its wealth and its squalor, its busy new life rising like a tide over its old conservatism, you have a fair symbol of modern Egypt as it is. Whirled away from the Custom-house in an admirable hackney carriage, as fast as frequent blocks by the way will permit, through the narrow and dirty alleys of the old native quarter, to your hotel in the fine square of Mehemet Ali, you find yourself on alighting amid all the surroundings of a lively French or Italian town, reminded that you are in the East only by the balmy atmosphere, the sapphire sky, the palm-trees on the other side of the square, and the Babel-like crowd of turbaned Arabs, jet-black Nubians, and many-raced Europeans passing and re-passing in noisy confusion below the hotel balcony—a hundred times more varied and picturesque than the street throngs of either Naples or Marseilles.

In size and commercial activity Alexandria is already the second port on the Mediterranean, and in point of antiquity was twelve hundred years old before the first brick of Cairo was laid. "Alexander," said Napoleon, "rendered himself more illustrious by founding Alexandria, and by purposing to transfer it to the seat of his empire, than by his most brilliant victories. This city should be the capital of the world. It is situated between Asia and Africa, within reach of India and

Europe: its harbour affords the only safe anchorage along the five hundred leagues of coast from Tunis, or ancient Carthage, to Alexandretta; it is near one of the ancient mouths of the Nile: all the navies of the world might moor within it, and in the Old Port they would be sheltered from the winds and all possibility of attack." It may be true that the ancient city bequeathed to the modern one nothing but its ruins[1] and its name, but even these were an inheritance to which Cairo can boast nothing equal; while the imperishable advantages of its situation—which, 2,000 years ago and for centuries after, rendered it the chief *entrepôt* of the world—have availed to restore to the modern city, after a long decadence, if not the wealth and splendour of its ancient namesake, at least a measure of

[1] Almost the only ruins that now reward the curiosity of the traveller are the Catacombs, and three splendid monoliths, miscalled Pompey's Pillar and Cleopatra's Needles. The first of these are of great extent, and possess some architectural remains of rare elegance and symmetry. The Pillar, which had nothing to do with Pompey, but was erected in honour of Diocletian, is a Corinthian column of red granite 99 feet high, including capital and base, and is believed to be the sole existing relic of the famous Serapeion. It was erected on its present site, overlooking Lake Mareotis and the modern city, to commemorate the Emperor Diocletian's siege and capture of Alexandria in A.D. 296, after the rebellion of Achilleus. Of the Needles—which had equally nothing to do with Cleopatra, but were brought by Julius Cæsar from Heliopolis to adorn his own temple, the Cæsarium—one is erect, almost within reach of the sea-wash of the new port, while the other, which was presented by Mehemet Ali to the British Government, is at length being unburied from the rubbish of a stone-cutter's yard close by for transport to England. Both obelisks are of red Syene granite, and are respectively 71 and 66 feet long. They are covered with hieroglyphs of the reigns of Thothmes III., Rameses II., and Sethi II., and date, therefore, fully twelve centuries before the Christian era. Those who feel interested in Alexandrian archæology will find, in a *Mémoire sur l'Antique Alexandrie*, published last year by Mahmoud Bey, the Arab astronomer to the Khedive, a very scholarly summary of all that is now known as to the topography, monuments, and existing remains of the old city.

prosperity which, among the sea-ports of the Mediterranean, is now rivalled only by Marseilles. It may be idle to hope that the Alexandria of the Khedives will ever renew the glories of the Ptolemaic capital, but it already symbolises the New Civilisation nearly as completely as the latter typified the Old. In architecture it has nothing, indeed, to compare with the palaces and temples, the public baths, the museums, theatres, libraries and obelisks of the city which was the scene of Cleopatra's strange wild history; nor in intellectual culture and activity with that in which Neo-Platonists and Christian fanatics, luxury and asceticism, literature and commerce, once dwelt together. But against these old-world glories it can show dockyards and arsenals, steam-engines and steam-ships, mills, factories, railways and electric telegraphs—instruments of human progress more potent than the Ptolemies or the Antonines ever dreamt of, and destined, it is reasonable to predicate, to raise Egypt to a higher rank than she has ever yet enjoyed as a civilised Power.

Modern Alexandria occupies only part of the site of its predecessor, being chiefly built on the isthmus that connects what was once the classic island of Pharos with the mainland, on which the old city stood. Successive alluvial deposits have widened this mole—the ancient Heptastadium—into a broad neck of land, the seaward end of which is occupied by the palace of Ras-el-Teen, the Arsenal, and several other Government buildings, after which, mainland-wards, comes the modern town. East and west of this peninsula lie the two harbours, called the New and Old Ports. The former of these, being completely exposed to the north winds and encumbered with rocks and shoals, has long been disused except by small native craft; though it

was not until the beginning of the present century that the much larger and safer western harbour was thrown open to Christian vessels. This latter is situated at the north-east end of the bay, adjoining the southern and western sides of the city in a nearly semi-circular form, and extending from the palace of Ras-el-Teen, by the Arsenal dock, to the terminus of the Cairo railway, at Gabâri. It is off this part of the general port that the great works described in another chapter are now in course of construction, which when completed will provide Alexandria with a harbour containing an area of 1,400 acres of still water, and landing-quays nearly two miles long. Already, safely berthed on its eastern side, a splendid floating dock 500 feet long and 100 feet wide —built in France and placed *in situ* at a cost of 127,000*l.*—affords the means of repairing the largest vessels—the only accommodation of the kind as yet available to merchant shipping in the Levant. The old lighthouse still occupies the site of the ancient Pharos, on a rocky projection stretching north-east into the entrance to the New Port, but, in 1842, after the opening of the Old Harbour to Christian shipping, its distance from the latter and the lowness of its light induced Mehemet Ali to build a new tower on Eunostus (now called Ras-el-Teen) Point, at the south-western extremity of the peninsula, whence a 20-second revolving light of the first class, since erected by the Khedive, flashes its friendly warning twenty miles out to sea. Nearly a mile behind this stands the viceregal palace built by Mehemet Ali, to whose ambition is also due the fine Arsenal that forms the next principal object of interest between the peninsula and the modern town. The development of this last has been mainly eastwards, towards the Ramleh railway station, which

only seven years ago lay far outside the city, but is now connected with it by fine rows of boulevard-like houses, let out in shops below and flats above, at rents little below the average of similar buildings in Paris. In this direction, too, an admirable road along the Mahmoudieh canal attracts on Fridays and other fête days crowds of private carriages, many of which might fitly figure in the Bois or Hyde Park. Of the whole city, indeed, it may be said that, although still "piebald," as Eliot Warburton found it a quarter of a century ago—"one half Europe, with its regular houses, tall, and white, and stiff; the other half Oriental, with its mud-coloured buildings, and terraced roofs, varied with fat mosques and lean minarets"—the municipal improvements effected by the Khedive have in respect of lighting, paving, police, and cleanliness, raised the large Frank quarter especially to a level with most second-class French and English towns, and placed it half a century ahead of even the Christian faubourg of Constantinople. These sanitary reforms have, of course, been fatal to much of the picturesqueness that attaches to and half redeems dirt and dilapidation all over the East, but enough of these æsthetic elements still survives in the native quarters on the mole and near the walls to preserve for them much of their old Oriental *cachet*. If generally, however, the scene that now meets the eye of the tourist can no longer be called Arabian Nights-like, it is still such as no European city can boast of. The following bit of *genre* word painting, by a recent writer already quoted, may be seen in real life any day between the Custom-house and Mehemet Ali Square, in the centre of which, in defiance of the Koran and all its commentaries, stands an equestrian statue of the old hero in the garb of seventy years ago, and clustering round it the

foreign Consulates, an English Protestant Church, and the best hotels: "Here came a file of tall camels laden with merchandise, stalking with deliberate solemn step through the bazaars; there rode a grand-looking native gentleman, in all the pride of capacious turban and flowing robes; yonder passed some ladies, on donkeys, enveloped in black *habara* and the more remarkable white muslin veil, which universal out-of-door costume of Egyptian only suffered two dark eyes to gleam from behind the hideous shroud. And if the carriages we saw had a smack of Europe, they were driven and attended by men in Oriental dress, and—even stranger still—were preceded, even at their best pace, by a bare-legged running Arab, who shouted to the passengers to get out of the way—the shrill cries of this active *avant-coureur* resounding on every side; and fortunate is the stranger who is not run over in the narrow streets by some cantering donkey, or knocked down by some tall camel laden with heavy boxes, as he stands staring at the unwonted scene—his whole attention riveted on the every-day life of an Oriental city. . . . But with all its novel sights and sounds—which, as his first specimen of an Eastern city, must leave an indelible impression on the stranger's mind—Alexandria is but semi-Oriental at least, and no more resembles Cairo than Calais is to be compared to Paris."[1] So again at the railway station, as sketched by another writer, is found a similar mixture of East and West, of the old and the new: "A motley crowd of wily Greeks, dusky Arabs, and soft-featured Syrians ferments before you; men, women, and children in every variety of costume and no costume; water-sellers, bread-sellers persistently pestering everybody; ghostly women in white, visible as human by their

[1] *The Nile and its Banks*, i. 20, 21.

flashing dark eyes and naked feet, flitting hither and thither in frantic search for a lost husband or friend. You will see solemn Turks and crafty-looking Jews, and perhaps a batch of recruits for the Khedive's army—Abyssinians, fine brawny powerful fellows in white tunics, with bare black legs, chubby faces, and dark lustrous eyes"[1]—the whole jostling with an equally noisy if less picturesque crowd of resident foreigners, Cook's tourists, or Indian passengers *en route* for the P. and O. steamer at Suez. The revival of the commercial prosperity of Alexandria has been followed by a corresponding recovery of its population, from 6,000—to which, according to Savary's estimate, it had dwindled less than a century ago—to more than 212,000, the official reckoning in 1872. Of this total about 48,000 are Europeans, who only numbered some 7,000 at the death of Mehemet Ali, the motley remainder being made up of Arabs, Turks, Copts, Greeks, Armenians, Jews, Maltese, and Levantines of every shade of mixed blood from Tunis to the Dardanelles.

Ramleh, which a few years ago was merely a summer village on the coast, four miles outside the Rosetta gate, has expanded into a suburban town, with two railways running into it, and is now the permanent residence of a considerable colony of Alexandrian Europeans, whose clustering villas and luxuriant gardens have converted what, little more than a decade ago, was a strip of desert sand, into one of the prettiest marine retreats in the Levant. Nearer town, along the banks of the Mahmoudieh canal, still finer mansions, embowered in yet greener gardens—here as blooming in January as any in England in May—lodge chiefly the Greek and Jewish magnates of the cotton market and the Bourse; while on

[1] *Under Egyptian Palms*, pp. 3, 4.

Fridays and Sundays the excellent road in front is crowded with equestrians and carriage riders, as varied in their mounts—from donkeys to *demi-sang* Arabians and English high-steppers—as in nationality, creeds, and shades of colour.

The trade of Alexandria was expected to suffer greatly from the opening of the Suez Canal, but although the greater part of the old overland traffic has been diverted into the new channel, the steady development in the general commerce of the country has more than maintained the flourishing statistics of this its principal port. Thus, while in 1868, the year preceding the opening of the Canal, the total number of vessels of all flags which entered Alexandria was 2,616, it had risen in 1873 to 2,736,[1] notwithstanding the rapid annual increase in the navigation through the Isthmus. The traffic inland, therefore, with Cairo and Upper Egypt, both by the Nile—through the Mahmoudieh canal to Atfeh, on the Rosetta branch—and the railway, now consists almost wholly of local imports and exports, and no longer in large part of transit trade with India. Of this, the weekly Brindisi mail and the passengers who accompany it now alone pass through Alexandria.

From Alexandria a morning "express" now makes the run of a hundred and thirty-one miles to Cairo in four hours and a half, the omnibus trains, at lower fares, taking six hours. After passing Ramleh, the line leaves the cultivated land, and runs through the eastern shallows of Lake Mareotis, which stretches away like a vast lagoon to the right—in winter, during full Nile, rising almost to a level with the embankment, but in summer

[1] Numerically falling, however, in 1875 to 2,473; but as nearly half of these were large steamers, there was a considerable actual increase in the tonnage. These figures also exclude the Khedivieh steamers.

presenting over nearly half its area a wide expanse of swampy marsh, peopled with pelicans, which rise like dense white clouds as the train rushes past. Again out on *terra firma*, the track lies through a perfectly flat expanse of teeming corn and cotton-land, reticulated everywhere with irrigating channels, and dotted at frequent intervals with the clusters of mud huts and their sheltering clumps of palm-trees that form an Arab village, with or without, according to their size, the relief of little white-washed cupolas and dumpy minarets, but all with their raised dove-cots to collect the precious pigeons' dung. Two other stations are rapidly passed, but no halt is made till Damanhour is reached, thirty-eight miles from Alexandria; and then again twenty miles further on, over another dead level of highly-cultivated plain, the Rosetta branch of the Nile is crossed, and the actual Delta entered. Thence, on past Kafr-es-Zayat and Tanta—famous, besides its thriving trade, for its annual fairs and fêtes in honour of Sheikh Achmet, a renowned santon—over a dozen more miles of the richest country to the Damietta branch, crossed at Benha junction, beyond which the express does not again stop before reaching Cairo, nearly thirty-two miles further on. But long before this the desert is sighted, stretching eastward to the great canal, "like a coast of cloud-land veiled in an amethyst light;" and westward, beyond the main channel of the Nile, away over the sandy wastes of Libya to Tripoli and the Fezzan. And then the Pyramids, looming against the western horizon, disappointing at first in their seeming littleness fifteen or twenty miles off, but, when approached nearer, overpowering in their massive and solemn grandeur beyond any other sight in Egypt. Simultaneously, to the left, come into view the Mokattem hills, on the last

spur of which the Citadel and the tapering minarets of Mehemet Ali's mosque first attract the eye; and ten minutes later, past the lonely obelisk of Heliopolis, and through a suburban approach of pretty villas and luxuriant gardens, the train rolls in to the "great Al Cairo."

In no part of Egypt are the changes effected within the past score of years so striking as in and around the capital. During the journey up from the sea, the sights and sounds that meet the eye and the ear are much the same as of yore, but on nearing Cairo a complete transformation scene begins. What in Saïd Pasha's time were cropped fields round the desolate railway station, are now enclosed ornamental gardens, crowded with bijou country houses, and, from the terminus itself in to the city, a new town with well laid-out streets flanked by handsome European houses and busy second-class shops. Inside what was formerly the old mural gate, the changes are greater still, and the surprise of the returning *habitué* culminates as he alights at Shepheard's, no longer from donkey-back—though donkeys are as numerous as ever—but from a well-appointed hotel omnibus or hackney-carriage, or proceeds a few hundred yards further on to the rival hostelry of the New Hotel. Rip Van Winkle rubs his eyes, but can hardly recognise the once familiar scene; the old has everywhere given way to the new, and where, twenty years ago, stretched the Esbekieh of those days with its huge sycamores, its stagnant canal, and its fringe of tumble-down native houses, he now sees files of imposing stone buildings, broad macadamised streets, and—enclosed within half its former dimensions—a new Esbekieh, so transformed, that if the ghost of Mehemet Ali could re-visit glimpses of the Cariene moon, it would be hard set to recognise the old *meidan* in the new public garden that now occupies its site.

Though inferior in historical interest and commercial importance to Alexandria, Cairo much exceeds its great sea-port in size and number of inhabitants, and excels it still more in all the attributes of an Oriental city. Founded in A.D. 969, by Gowher, a general of the first Fatimite Caliph, it lies in a sloping plain between the east bank of the Nile and a spur of the Mokattem hills, about a dozen miles above the fork of the Delta. Five years later it became the capital, instead of Fostat, which Amrou, three centuries earlier, had built close by on the site of the Roman town and camp of Babylon, and which, for distinction, then received its still retained name of Masr-el-Ateekah, or Old Cairo. Boulak, the river port of the new town, was formerly more than a mile distant, but the separating space has been nearly all built over, and the city now covers an area of about four square miles. Although nearly a third of this has been modernised by the improvements effected during the past dozen years, and which are still in progress, the new harmonises sufficiently with the old to leave the whole still indisputably the queen of Eastern cities. In some respects less purely Oriental than Damascus, it yet presents a much more lively and varied picture of Eastern life than the solemn and secluded capital of Syria, and in this regard also as far surpasses Constantinople as Bagdad excels Smyrna. In Cairo only are now to be found the scene and most of the *dramatis personæ* of the "Thousand and One Nights," within stone's throw of nineteenth century civilisation in many of its latest results. The short quarter of an hour's drive from the railway station transports you into the very world of the Caliphs—the same now as when Noureddin, Abou-Shamma, Bedreddin Hassan, Ali Cogia, the Jew Physician, and all the rest of them played their parts any

time since or before Saladin. The old city itself is still a labyrinth of dark, dirty, intricate lanes and alleys, in many of which two donkeys can hardly pass abreast, and whose toppling upper storeys so nearly meet as to shut out all but the narrowest streak of the cloudless sky; while the masquerading-looking crowd below differs in nothing from that which Warburton saw a quarter of a century ago: "Ladies wrapped closely in white veils, women of the lower classes carrying water on their heads, and covered only with a long blue garment that reveals too plainly the exquisite symmetry of the young and the hideous deformity of the elders; here are camels perched upon by black slaves, magpied with white napkins round their heads and loins; there, are portly merchants, with turbans and long pipes, smoking on their knowing-looking donkeys; here, an Arab dashes through the crowd [not quite] at full gallop, or a European, still more haughtily, shoves aside the pompous-looking, bearded throng; now a bridal, or a circumcising procession, squeezes along, with music that might madden a drummer; now the running footmen of some Bey or Pasha endeavoured to jostle you to the wall, unless they recognise you as an Englishman—one of that race whom they think the devil himself can't frighten or teach manners to." [1]

The whole city is divided into ten quarters (*toums*), under the immediate supervision of as many sheikhs, and for the most part separated from each other by gates that are closed at night. They are—the Esbekieh, or modern European quarter, in which, with the adjoining new district of the Ismaïlieh, the chief municipal improvements and embellishments have been carried out; the Bab-Sharyé quarter, Abdeen (the Cairene Sublime Porte), Darb-el-Gammamiz, Darb-el-Ahmar, Gemelyé,

[1] *The Crescent and the Cross*, p. 46.

Chessun, Kaliffa, Boulak, and Old Cairo. Of these the Esbekieh, with the Ismaïlieh and part of Abdeen, now forms a handsome European town, intersected by broad, well-paved, and gas-lit boulevards, flanked by shops and villas worthy of the Riviera, owned for the most part by Pashas, Beys, and wealthy foreigners to whom the Khedive has granted free building sites on the sole condition of the houses erected being of a certain architectural merit. Up till the time of Mehemet Ali, the whole of this great square was a marshy waste, submerged during the inundation and a half-dry swamp during the remainder of the year. The old reformer drained it by means of a circular canal, and raised the enclosed area above the level of the yearly flood. But during the reigns of Abbas and Saïd nothing further was done to improve the quarter, and it failed to attract a reputable population until, in 1867, the complete transformation of the neighbourhood was begun by the present Khedive. Under the hands of a skilful French landscape gardener the Esbekieh itself was entirely re-modelled; the narrow canal gave place to an ornamental lake, and the whole grew into a miniature Parc Monçeaux, in which the rare luxury of green turf, well-kept shrubberies, shady walks, artificial grottoes with cool rippling cascades, cafés—native and European—*al-fresco* theatres, and capital military bands, now make up incomparably the finest public garden in the East. Concurrently with the embellishments of this little central park, new streets, boulevards, and public buildings sprung up all round it. On the western side already stood Shepheard's hotel, no longer British but in name, and a few hundred yards beyond an English company had built the New Hotel, since purchased by the Khedive, and now under French management rivalling its older neighbour as the second

best hostelry in Egypt. North and east imposing blocks of European shops and private houses, fronted mostly by deep shady arcades, overlook the garden on these sides; while southwards, the new opera-house and the French theatre behind it, with a still finer pile of private buildings, and the joint Ministries of the Interior and of Public Works, complete an architectural circle worthy of any second-class European town. The principal new streets are the Boulevard Mehemet Ali, which runs from the western end of the Moskee to the Citadel, through nearly a mile of old Arab rookeries, whose bisected interiors have been walled in by rows of well-built shops and private houses on either side; a second, which now forms the chief thoroughfare of new Cairo, from the opera-house to Abdeen; a third, at right angles to this, down through the new quarters of Ismailieh; and a fourth, past the northern end of the New Hotel, and the English church, to the Nile at Boulak, where, pending the erection of the new museum, a temporary building on the river bank contains the richest and most instructive collection of Egyptian antiquities in the world, the result mainly of the labours and researches of Mariette Bey since the accession of the Khedive.

In Abdeen, the favourite winter-palace of the Khedive, his Highness has virtually the whole administration focussed into his own private cabinet, from which he may be said to personally direct the entire government of the country. His other palaces are those of Ghizereh on the left bank of the Nile, opposite Boulak; of Kasr-en-Nil, higher up on the right bank; of Ghizeh—not yet completed—near the village of the same name, opposite the island of Rhoda, which contains the famous Nilometer; of Kasr-en-Noosa, on the Shoobra-road—the long and beautiful avenue of sycamores and acacias

that forms at once the "Drive" and the "Rotten Row" of Cairo—which is generally devoted to the entertainment of distinguished foreigners; and that of Shoobra, formerly the favourite residence of Mehemet Ali, from whose only surviving son, Halim Pasha, the Khedive purchased it a few years ago. The fine gardens attached to this last are one of the "sights" of the Egyptian capital.

Besides the Esbekieh, Cairo has three other large open spaces within the city boundaries—the Birket-el-Fyl, which gives its name to one of the old central quarters; the Roumeyleh, between the mosque of Sultan Hassan and the Citadel; and the Kara-meidan, the chief market-place for horses, donkeys, and camels. All three of these have been cleared of the ruins and dirt that formerly encumbered them, and are now neatly-kept public squares. In another chapter mention will be made of the canals intersecting the city, of the two fine iron bridges which have been thrown across the Nile, and the massive embankment beyond the second of these along which runs the new carriage road to the Pyramids. It may be added that, besides numerous special bazaars for the different trades and handicrafts, Cairo further contains no fewer than 523 mosques—many of them *chefs-d'œuvres* of Arabian architecture, but mostly in a sad state of dilapidation—30 Christian churches, 10 Jewish synagogues, 1,300 khans, 1,200 cafés, and 70 public baths. Of the mosques, the most remarkable in point of architectural merit are—to mention them in order of age—those of Amrou, in Old Cairo, built A.D. 640; that of Sultan Ahmed-ebn-Tooloon (879), which embodied the principle of the pointed arch three centuries before its introduction into Europe, and which the late Lady Duff-Gordon—with

characteristic gush, though hardly with exaggeration—calls "an absolute jewel of perfection and purity, perfectly simple, and yet with details of *guipure* and embroidery in stone which one wishes to kiss, they are so lovely;" but this mosque is now in so ruinous a condition that it is no longer in use; those of Seté-el-Zeinab (910) and the Sultan Hakem (1007), the fanatical patron of the Druses; the Hassaneyeh (1354), the grandest mosque in Cairo, which is said to have cost 700,000*l.*, and is perhaps the most perfect specimen of Arab architecture to be found anywhere in the East; the El-Ghouny (1522), which gives its name to the fine bazaar at the extremity of which it stands; and, most famous of all, the El-Azhar, which, originally founded by Gowher, the general of Moez, in 970, has been several times rebuilt and enlarged, till its last restoration in 1762; it is now the chief university of Arabdom, and the great divinity school for all Islam. The scandalous abuse of the Wakf trusts has so reduced the revenue for the support of these once splendid buildings, that most of them are now in a sad state of dilapidation and decay—to the lover of art, one of the tristest sights that strikes the eye in the Egyptian capital.

High over all these towers "El-Kaleh"—the Citadel—built by Saladin in 1166, on the last rocky projection of the Mokattem range, which here terminates abruptly, close by the Roumeyleh and Kara-meidan squares. This fine fortress is in itself a small town—comprising besides the barracks for a strong garrison, the Ministry of War, the old palace of Mehemet Ali—now only used for State receptions—the large rather than elegant mosque of Oriental alabaster built by him on the model of those of Constantinople and which contains his own tomb, the famous Joseph's well, the

mint, a cannon-foundry, workshops, magazines, and all the other adjuncts of a great military establishment. Here, immediately inside the "Arab's Gate," the northern entrance to the fortress, was the scene of the Mamlouk massacre in 1811, respecting which political moralists have pronounced such conflicting judgments, but the practical effect of which was to replace the anarchy of centuries by order and settled government. To most visitors, however, the chief attraction of the old stronghold is the magnificence of the view obtained from its ramparts. Immediately below lies Cairo in all its Oriental picturesqueness, its domes, minarets, and feathery palm-clumps rising clear and sharp in this most pellucid of atmospheres; behind, the chain of the Mokattem, trending in broken links to the Red Sea: northwards, beyond the solitary obelisk that marks the site of Heliopolis, the luxuriant vegetation of the Delta stretching away to the lakes that separate it from the Mediterranean; while, west and south, the eye takes in the sacred mysterious Nile, dotted far into the distance with sails that flash in the sun; the time-defying Pyramids standing out phantom-like against the grey background of the Libyan desert; the palm-groves that wave over buried Memphis and its sole relic, the prone statue of Rameses; the smaller but still older pyramids of Abousheir, Sakkara, and Dashour; and, beyond these, the winding valley of Upper Egypt losing itself in the hazy distance half way up to Thebes. The splendour of this panorama, as seen by daylight, is only surpassed by the incredible beauty of a sunset viewed from the same spot, when the crimson haze of the short Egyptian twilight bathes the whole in that wondrous "after-glow," to which neither Hildebrand nor Holman Hunt have done complete justice. There is, indeed, no other

view in Egypt, and few in the world, to compare with that which delights the eye and feeds the imagination from this spot.

Since the establishment of order in Egypt by the suppression of the Mamlouks, the population of Cairo has greatly increased. During the French occupation it numbered only 260,000, but before the death of Mehemet Ali it had increased to nearly 300,000, and at the date of the latest official returns, in 1872, it had further swelled to upwards of 350,000; of whom about 260,000 are native Mussulmans, 30,000 Copts, some 20,000 Abyssinians, Nubians, and other Soudanis, 5,000 Turks, 10,000 Jews, 30,000 Syrians and other Levantines, and nearly 20,000 foreigners. As already mentioned, Cairo forms a separate government, administered by a governor and deputy-governor, with the aid of a chief Cadi, a correctional magistrate—the Zabit—and an efficient municipal police. All the modern parts of the city are now well lit with gas (introduced in 1870), and a French water company pumps water from the Nile near Old Cairo, and at Boulak into reservoirs at Abbasieh, and distributes thence an abundant supply of excellent water, ample for all purposes of domestic uses, street watering, and garden irrigation. The sanitary police is however still very defective, and not alone in the old town, but even in open spaces of the new quarters, both the eye and the nose meet with constant cause of offence. The public cost of gas and water; as also the deficit on the theatres, is defrayed out of the city octroi, which produces nearly 350,000*l.* a year.

The social attractions and conveniences of Cairo have kept pace with its municipal improvements. Travellers are now no longer dependent on a single hotel, nor are foreign residents forced to burrow in the old

tumble-down tenements of the native town. For the former, Shepheard's has been supplemented by the New Hotel, the Hôtel du Nil, the Hôtel d'Orient, and half a dozen other minor guest-houses, adapted to all pockets and national tastes; while for the latter, the villas in the new Ismaïlieh quarter, and the more massive piles round three sides of the Esbekieh and down the Fagála on the road to Abbasieh, afford every sort of residential accommodation, from a detached modern house *entre cour et jardin* to a spacious family flat, or a modest bachelor *appartement* of two or three rooms. Good carriage roads, too, lead everywhere from Abbasieh and Heliopolis to Old Cairo or the Pyramids, and on Fridays and Sundays especially the splendid drive through the long avenue of arching acacias and sycamores on the Shoutra road is as lively as, and a hundred times more picturesque than Hyde Park in May or June—fellah-bestridden donkeys, Arabs of the Nejd and prancing English bloods ridden by dandy Beys and still dandier Jew bankers, jostling every variety of wheeled equipage, from street hackneys packed with Cook's tourists, to the smartest of London or Vienna-built broughams and Victorias, with eunuch-escorted ladies of the Khedive's harem, wives of the Consuls-General, or of the Shemitic financiers aforesaid, or Polish "countesses"—last from Monaco—beguiling bachelor guests of Shepheard's or the "New." From October till April the opera-house, and French comedy theatre, with the best troupes money can secure, afford on alternate evenings lyrical and dramatic entertainment hardly to be surpassed in Paris or London; while Greek and German *brasseries* and musical cafés—in which mixed Bohemian bands and native performers on the *cka'noon*, the *'oo'd* and the *kemen'geh* give the visitor his choice between the lively strains of

Wagner and Strauss and plaintive if discordant Arab airs—minister to meaner tastes by the score. In the fine group of buildings erected by the Duke of Sutherland, on ground given him by the Khedive, overlooking the Esbekieh gardens, the new Khedive Club—founded on the model of our best London institutions, under the patronage of the heir-apparent and the chairmanship of the British Consul-General—provides *salons*, a *cuisine*, and billiard and reading rooms, not unworthy of Pall Mall, where members, or travellers admitted to temporary fellowship, may read nearly all the periodicals to be met with in the Travellers or the Reform, and, if so minded, may play at billiards or "cayenne" whist for stakes not permitted at either.[1] Add to all this, that frequent balls and concerts at the palace during the winter bring together the official, financial, and commercial *élite* of both Cairo and Alexandria, and make everybody who is anybody known to everybody else—and the result is a sum-total of social *agréments* not to be matched anywhere else in the East.

Although the "sights" of Cairo lie outside the scope of this volume, yet to write at all of the city, even as it is, without allusion to at least Heliopolis and the Pyramids would be like commenting on *Hamlet* without mention of the Prince. Excellent carriage roads—the work of the present reign—now lead to both, facilitating their inspection without weakening the weird interest with which these oldest of human monuments impress, not to say overpower, the imagination. The drive to the former, which is about eight miles off,

[1] A similar establishment, also under the patronage of Prince Mehemet Tewfik, and called the "Mehemet Ali" Club, has been more recently opened at Alexandria, where, like this other at Cairo, it is already an assured social success.

leads down the Fagála past Abbasieh—erst the palace of Abbas Pasha, but now a barrack and military school, in which that poor cowardly bigot, a prey to the fear of assassination, used to shut himself up under the care of extra guards, and with saddled dromedaries in the stable ready to carry him into the desert on the first alarm. Thence on over the fine plain on which Sultan Selim, in 1517, fought the battle that won him Egypt, and where, in 1800 again, the French under Kleber in their turn beat the Turks, and regained Cairo—to the famous jessamine and orange-gardens of Mataraëeh, in which stands the "Virgin's Tree," the grand old sycamore that (tradition says) sheltered Joseph and Mary after their flight into Egypt. Less than a mile farther on, through a shady acanthus grove, and you reach the lone granite obelisk—the oldest in the world —that marks the site of the famous "City of the Sun," in the family of whose high-priest Joseph found his bride, where Moses learned the wisdom of the Egyptians, Jeremiah penned his Lamentations, and Plato thought out his sublime doctrine of the immortality of the soul. For nearly 4,000 years this solitary pillar has pointed with its tapering apex to the sky, and yet the hieroglyphs on its sides are still nearly as sharp and distinct as if graven a year ago. It is sixty-two feet in height, with a diameter of six feet at the base, and is one of the many enormous monoliths quarried 500 miles away at Assouan, whose cutting, transport, and placing *in situ* are still perplexing problems to the modern engineer. Some mounds of crumbled bricks extending over a considerable area, every square foot of the interspaces of which is now cropped with maize, clover, or cotton, are the only other vestiges of this once sacredest of Egyptian cities, from which, as he rides or drives

back to mushroom Cairo, even the most light-hearted of tourists can hardly fail to carry away a mournful sense of the vanity of human things.

The excursion to the Pyramids, which was once almost formidable from the inconvenience of crossing the Nile by a ferry and then riding on donkey-back for seven or eight miles along a tortuous track, broken at frequent intervals by ruinous canals or patches of submerged ground, is now a pleasant carriage drive of an hour and a half over the fine iron bridge from Kasr-en-Nil to Ghizeh, and along the broad macadamised and tree-fringed *chaussée* that—high above the inundation—now leads in nearly a straight line from the river up to the sandy slope leading to the platform on which the Pyramids stand. The plain thus crossed forms one of the prettiest pieces of landscape in Egypt, blooming everywhere after the inundation with the richest verdure, and dotted all over with villages embosomed in thickets of date-palms, tamarisks, acacias, and sycamore-figs, than which—as looked at a mile or two off—nothing could well be more picturesque. As the visitor is seen approaching, a score or more of half-naked Arabs swarm out of one of these rookeries near the extremity of the plain, the sheikh of which has the monopoly of supplying guides for the exploration, and as the carriage pulls up, a wordy battle in the guttural vernacular or broken English (which most of these Pyramid Bedaween speak) begins, as to who shall have the honour and profit of conducting the *howadji* into and up the vast pile whose stupendous magnitude is now first realised as the eye mounts the gigantic staircase from its base to its far-away summit, compelling a sense of awe and wonder such as perhaps no other work of man's hand could inspire. It would be surplusage to add another to the

many descriptions of these oldest and grandest of human monuments, with which the reader is already familiar; but as, although hoary with the age of nearly sixty centuries, they are still the most striking artificial features of Egypt as it is, it may here be repeated that these Pyramids of Ghizeh—as the colossi of Cheops, Chephren, and Mycerinus (a pigmy by the side of the other two), and half a dozen smaller cairns are distinctively called—form only one of many groups of similar structures extending from Abouroash, five miles north-west of Ghizeh, to Illahoun in the Fayoum. From the top of the Great Pyramid, the eye, looking away southwards over the palms of Memphis, takes in the most important of these other groups—those of Sakkara, Abousheir, and Dashour, stretching along the western bank of the river, weird vestiges of a past that was already remote before history began.

In a sand-hollow a few hundred yards to the south-east of the Great Pyramid, stands, or rather couches, the half-buried Sphinx—"gazing straight on with calm eternal eyes" across the vista of seven thousand years, for, according to Mariette Bey, it was already old before the stupendous gnomon of Cheops was built. But of this again no description need be attempted: from Pliny to Miss Edwards, its solemn and majestic presence has already been the theme of a hundred pens. The fine rhapsody of Mr. Kinglake may, however, be once more quoted:—"Upon ancient dynasties of Ethiopian and Egyptian kings, upon Greek and Roman, upon Arab and Ottoman conquerors, upon Napoleon dreaming of an Eastern empire, upon battle and pestilence, upon the ceaseless misery of the Egyptian race, upon keen-eyed travellers—Herodotus yesterday, Warburton to-day—upon all and more this unworldly Sphinx

has watched, and watched like a providence, with the same earnest eyes, and the same sad tranquil mien. And we, we shall die, and Islam wither away; and the Englishman, straining far over to hold his loved India, will plant a firm foot on the banks of the Nile, and sit in the seats of the Faithful; and still that shapeless rock will lie watching and watching the works of the new busy race, with those same sad, earnest eyes, and the same tranquil mien everlasting. You dare not mock at the Sphinx." [1]

As Cairo is the usual starting-point for the Nile voyage, it may here be said that this may now be done either in the old fashion by *dahabeeyah*, or by the cheaper and more rapid, but much less enjoyable steamers of the Khedivieh Company, which ply fortnightly between Boulak and the First Cataract from November to March, making the run up and down in three weeks, at an inclusive fare of 45*l.* for the trip; or it may be made with the variation of going by railway to Assiout, and there joining the steamer. For those, however, to whom time and money are minor considerations, the *dahabeeyah* will always retain its special attractions. The hire of these picturesque craft—which, as is seen from the tomb frescoes, are in form and outline close copies of the old Pharaonic barges—varies from 60*l.* or 70*l.* to 150*l.* or 180*l.* a month, according to the size and furniture of the boat; but an inferior class called *cangias* may be had at lower rates. Either may be hired for a round sum for the trip, according to the limit of the voyage, or by the month for the sums stated, which include crew and all other charges connected with the vessel, travellers only finding their own servants and provisions. Of the delights and advantages of a Nile voyage, whether for pleasure or for health, nothing need here be said, seeing

[1] *Eothen*, p. 327.

that—except as regards the climate which, now as ever, makes mere life a luxury, and a landscape monotonous indeed in its outward forms but infinite in its wealth of tropic beauty and the ever-changing play of light and shadow that still glorifies the whole—it carries you away beyond printing-presses and cotton-mills, sugar factories and railroads, into Egypt of the past, with which the object of this volume is not concerned.

It only remains to add that Cairo is the centre of a very considerable but mostly transit trade in gums, ivory, hides, and ostrich feathers from the Soudan, of cotton and sugar from Upper Egypt, of indigo, shawls, and carpets from India and Persia, of sheep and tobacco from Asiatic Turkey, and of machinery, hardware, cutlery, glass, woollen and other manufactured goods from Europe.[1]

Rosetta, third in the official list of "cities," though fourth in point of size and population, lies forty miles east of Alexandria—with which it is now connected by railway—on the western branch of the Nile, to which it now gives its name, six miles in from the sea. It is considerably older than Cairo, having been founded during the Abbasside dynasty by one of the usurping Tooloonide kings, in A.D. 870. It was long one of the

[1] In connection with Cairo may be mentioned the village of Helwân, long famous for its sulphur springs, but which has only become fashionable as a health resort within the past three or four years. It lies on the eastern side of the Nile, two and a half miles from the river, and *fifteen* and a half above the capital, with which it is now connected by a railway, opened last year, from the Roumeyleh Square, below the Citadel. A fine bath establishment has been built over the spring—which has a natural heat of 86° Fahr.—and close by it an excellent hotel. The attractions of the place are already so great that M. Blanc, the play-king of Homburg and Monaco, recently offered the Khedive a large sum for permission to introduce the additional allurements of *rouge et noir*. His Highness, however, refused the offer, as he had previously refused a much larger one for leave to open another "Kursaal" in Cairo itself.

most important commercial towns of Egypt; and before the cutting of the Mahmoudieh canal by Mehemet Ali the whole of the overland trade from India passed through it, in consequence of the decay of the old canal of Alexandria. When captured by the French in 1798, it had a population of more than 20,000, which, after since dwindling to less than 14,000, has recovered to 15,000, with a corresponding revival of its commercial activity, which is, however, still greatly impeded by a sand-bar at the mouth of the river, passable only by small craft. Extensive gardens and a very salubrious air render the town itself one of the most agreeable in Egypt, and, before Ramleh grew up, made it a favourite summer resort of Alexandrians and Cairenes. It was here that the British expedition, sent in 1807 under General Fraser to effect a diversion in favour of the Mamlouks as a counter-stroke to French policy, suffered disastrous defeat by Mehemet Ali; and here, too, eight years earlier, was found by the French, while digging the foundations of a fort a short way below the town, the famous "Rosetta Stone" now in the British Museum, the trilingual inscription on which first furnished Dr. Young and Champollion with the key to the old sacred Egyptian writing.

Eighty miles beyond, DAMIETTA similarly gives its name to the eastern estuary of the Nile, five miles up from the sea. Here again, a bar at the river-mouth limits the navigation to vessels of not more than sixty tons, but these carry on a considerable coasting trade, and also with Greece. The chief exports are rice, dried fish from Lake Menzaleh, dates, hides, bones, linseed, and beans. It was formerly famous for its manufacture of leather, and for the striped linen cloths called *Dimity* (from *Dimyát*, the Arab name of the town), but both

these have long ceased to be specialities of the place. The existing town—which, though standing on the eastern bank of the river, properly belongs to the interior Delta—dates from the thirteenth century, but prior to that time a city of the same name—anciently Tamiáthis—stood about four miles to the south. This latter then formed the chief eastern bulwark of Egypt against the crusaders, by whom it was more than once taken, and was indeed the basis of the operations of St. Louis in the unfortunate sixth crusade. It was in consequence razed, and re-built on its present site by the Mamlouk Sultan Beybars, who at the same time closed the river against the Frankish ships by sinking stone-laden barges across its mouth. The present population of the town, which is estimated at 29,400, consists chiefly of native Moslems, with a few Syrians and Levantine Greeks.

PORT SAÏD, thirty miles farther east, owes its origin to the great canal, and is therefore barely eighteen years old. In April, 1859, M. de Lesseps and his little band of pioneer navvies landed on what was then a desolate strip of sand-bank between the Mediterranean and the shallows of Lake Menzaleh, and began his great work by selecting the site of the city and port which were intended ultimately to rival and even to supersede Alexandria. The spot was chosen, not because the shortest line could be drawn from it across the Isthmus—that would have run farther eastwards, through the Gulf of Pelusium—but because it was the nearest point to deep-sea water along the coast, and in honour of the then Viceroy it was named Port Saïd. The very site, however, of the future town had to be formed, and this was done by spreading over the sandy slip the argillaceous mud dredged from the adjoining lake, which the

fierce heat of the Egyptian summer soon hardened into a sufficiently firm foundation for the workshops and other light structures that rapidly sprang up along the line of the new harbour. The coast being here an open roadstead, the port had also to be artificially created; and this was effected by running out to sea two great concrete moles, respectively 2,726 and 1,962 yards long, and 1,500 yards apart. The space thus enclosed forms a triangular port of about 550 acres, with 30 feet of depth at the entrance, and is connected with an inner harbour, called the "Grand Bassin Ismaïl," by a channel 300 feet wide and 26 deep, through which the great ship canal is reached. Joining on to this principal inner basin are the "Bassin Sherif," the "Bassin des Ateliers," now little used since the completion of the works, and the "Bassin du Commerce," north and west of which the principal part of the town itself lies. The native quarter is scattered westward over the strip of sand between the sea and the lake. A fine lighthouse stands at the shore end of the western mole, from the lantern of which, 150 feet high, a first-class electric light flashes twenty miles out to sea, and smaller coloured lights are also placed at the seaward extremities of both. The new port thus formed is—and until the completion of the great works at Alexandria will remain—the safest and most easily-approached harbour anywhere between Tunis and Smyrna. As there are no springs on this part of the coast, the water-supply of the town is pumped through a double row of iron pipes from the fresh-water canal at Ismaïlia, and to provide against accidents a three-days' provision is kept stored in a large reservoir called the "Château d'Eau." As might be expected from its origin and relations, Port Saïd is in appearance rather a French than an Egyptian town; and its

regularly-laid-out streets, squares, quays, hotels, and other adjuncts of a European seaport wholly lack the picturesqueness of the towns and cities of the Delta and Nile valley. Its trade is almost exclusively limited to the supply of vessels passing through the canal, and its population—which includes some of the worst samples of Maltese, Greeks, Jews, and Italians to be met with in the Levant—three years ago numbered 8,671 of all nationalities.

In size merely a fort and a village, EL-ARISH owes its rank as a *mohafza* to its position as the frontier town between Egypt and Palestine. The little river, of the same name, which here forms the actual boundary, is dry during the greater part of the year, but after the rains it empties into the Mediterranean a tolerably rapid though narrow stream. Except as a Customs station and frontier garrison, the place is of no importance, and its population numbers only 2,284.

Like Port Saïd, ISMAÏLIA is a creation of the Suez Canal. Sixteen years ago its site was a barren waste of sand, and now, with a population of more than 3,000, it is the prettiest and most attractive town in Egypt. It is situated exactly in the centre of the Isthmus, on the western shore of Lake Timsah, through which the Canal runs, and on its three other sides is belted by luxuriant gardens filled with flowers and fruit-trees, for which the adjacent fresh-water canal supplies abundant irrigation. The town itself is well built, chiefly of stone from the "Carrières des Hyénes" on the other side of the lake, and its broad macadamised streets and handsome squares, bordered with young vigorously-growing trees, have an air of neatness and even elegance to which the best parts of Cairo and Alexandria have not yet attained. Its main artery is the Quai Méhémet

Ali, a fine avenue a mile and a quarter long and some forty yards wide, flanked on one side by the fresh-water canal, and on the other by a long chain of private houses, the most noteworthy of which are the pretty Swiss châlet of M. de Lesseps, and, a short way beyond, the wooden palace hastily built to receive the Khedive's more illustrious guests at the opening of the Canal. At the end of this quay are the works for pumping water from the fresh-water canal into the conduit that supplies Port Saïd and the intermediate stations, as mentioned above; in a well-equipped *établissement de bains* you may bathe in the salt water of Lake Timsah, and on coming out have a douche fresh from the Nile, 130 miles off. Ismaïlia is still less likely than Port Saïd to become a place of any considerable trade, but the excellence of its climate—tempered during the hot months by a constant breeze from the lake, and free at all seasons from the night-dews and sea-fogs of the lower Delta—and its facility of access by railway from Cairo and Alexandria are likely to render it a favourite bathing resort to the annual summer exodus from those cities.

SUEZ, fifty miles farther south by the railway which closely skirts the fresh-water canal, has few or no features in common with this little capital of the Isthmus. The actual town dates from the middle of the fourteenth century, when it took the place of Kolzoum (Clysma)—itself the successor of Arisnoë—and the site of which is still marked by a mound about half a mile farther north. The position was always one of commercial importance, and a succession of towns had risen, flourished, and disappeared in turn, on or near it, as the Red Sea receded southwards to the head of the two gulfs in which it now terminates, and to the westernmost of which Suez gives its name. The discovery,

however, of the Cape route to the East, a century and a half later, diverted the current of trade from its ancient channel, and the town sank into little more than a fishing village, galvanised only into occasional life by the passage of caravans between Arabia and Egypt. After the conquest of the latter by the Turks, Suez became a naval depôt for the Ottoman fleet in the Red Sea, and from it were dispatched the expeditions which added Yemen, Aden, and other points on both sides of the Sea to the dominion of the Porte. But these contributed nothing to the commercial revival of the town, which further suffered severely during the French occupation in 1798, when the place was nearly half demolished to make way for fortifications that were begun, but never completed. The adoption, however, of the overland route, in 1837, for the transit of the Indian mail was the beginning of a new era for Suez, followed up as it was five years later by the establishment of a regular line of the P. and O. Company's steamers to India, to which a similar service of the French Messageries was subsequently added. The traffic thus created was further developed in 1857 by the opening of the railway to Cairo, in substitution of the old camel and four-horse-waggon service across the desert. Six years later the completion of the fresh-water canal from Ismaïlia furnished the town, for the first time in its history, with an abundant water supply,[1] and this—coupled with the various works in connection with the maritime Canal, the docks, quays, and other local improvements—in less

[1] It had previously been dependent on a couple of scanty and brackish springs, two hours distant on the Arabian coast; on a third of similar quality a day's sail south on the African shore, and on such further supply as could be brought on camels' backs, and afterwards by railway, from Cairo—the whole provision from all these sources being barely sufficient for a population of at most 6,000.

than ten years swelled the population from 4,000 in 1859 to 16,000 in 1868. With the completion of the Canal, the activity of the place somewhat decreased, and the population fell to 13,000, which the gradual completion of the other works has since further reduced to between 11,000 and 12,000—composed, besides natives, of Arabs from all parts of the eastern coast, Persians, Indians, and the usual medley of Greeks, Levantines, and Europeans, whom trade or labour has permanently attracted to the town. Of this last itself, a word or two of description will suffice. The native quarter is chiefly built of sun-dried bricks, and except in containing four or five small mosques, a Greek church, and one or two unpaved squares, or *meidans*, differs little from the common run of large Egyptian villages. The Prefecture, or government-house, is an imposing brick structure, which groups within its limits the residence of the governor, the chief police, telegraph, and other public offices, and, on its northern front, the railway platform. Northwards of this lie the substantial storehouses of the foreign steam companies, the water-works, the English and French hospitals, and the fine hotel built in 1845 by the Egyptian Government for the accommodation of overland passengers, and which is now leased by the P. and O. Company. This building abuts immediately on the old harbour, and is connected with the railway station, a few hundred yards off, by a special line of rails. More prominently than any of these, stands a fine châlet, built by Saïd Pasha on the mound of Kolzoum, from which a splendid view is obtained. In front lies the town—surrounded on three sides by the desert—the harbour, roadstead, and mouth of the canal; on the left are visible the rosy peaks of Sinai, and on the right the violet-tinted range of the Jebel-Attakah, with the land-

locked gulf stretching blue and beautiful as an Italian lake between. The new harbour—the works in connection with which will be described in another chapter—lies nearly two miles south of the town, with which it is connected by a broad stone-faced embankment, supporting a fine carriage-road and a branch railway that conveys goods and passengers right down to the ships. Nearly due east is the Suez Canal Company's port, including extensive office buildings, the quay called "Waghorn's Quay," on which the Company has erected a statue of the indefatigable promoter of the overland route, and, beyond these, the entrance to the Canal itself.

Suez completes the list of Egyptian "cities," but Souakim and Massowah—the two principal Red Sea ports after Suez—being separate administrations, also fall within the category of *mohafzas*. The former is situated, in lat. 19° 49′ N., at the extremity of a narrow bay about fifteen miles long, and fringed on both sides by coral reefs. The town itself stands on the innermost of several small islands, and is separated by a strait about five hundred yards wide from its suburb, El-Geyf, on the mainland. The harbour, which is formed by a curving continental headland, lies east of the town, the west side affording no anchorage for ships. Souakim carries on a considerable trade with the opposite Arabian coast, its chief exports being *dhoura* from Taka, water-skins, leather, sacks, hides, liquid butter, palm-leaf mats, and slaves from Sennaar and Darfour. It communicates with the interior by a caravan route to Berber on the Nile, and its population is officially estimated at 4,078.

Massowah, 270 miles farther down the coast, in lat. 15° 44′ N., stands also on a small coral island separated from the continent by the shallow channel of Adowa. The harbour, though narrow at the en-

trance, is deep and easily accessible, and affords safe anchorage for a large number of vessels. Owing to the scarcity of fresh water, the island and its immediate neighbourhood on the mainland produce nothing available for trade, but it carries on a considerable traffic with the Hedjaz and Yemen in gold dust, ivory, rhinoceros horns, and grain, brought down by caravans from Khartoum and the upper countries on the Blue and White Niles: it is also the terminal point southwards for the line of Egyptian Government steamers which ply between this point and Suez, touching at Djeddah and Souakim. Its position as the chief maritime outlet of Abyssinia will give it greater importance whenever that country becomes Egyptian territory, but in the meantime its population does not exceed 2,350.

Of the 113 "towns" of Egypt proper, it will suffice to note merely the more important provincial *chefs-lieux*, many of which exceed in size and population most of the "cities" above noticed. Amongst these *Tanta* ranks first in commercial activity and number of inhabitants—these latter amounting in 1872 to 60,000. It is the capital of the province of Garbyé, in Lower Egypt, and a principal station on the Alexandria and Cairo railway, seventy-six miles from the former, and fifty-five from the latter city. Four branch lines from Damietta, Zifté, Dessouk, and Shibeen-el-Korn also here join the main trunk line, and additionally contribute to the commercial movement of the town. Its chief local importance, however, is derived from three great fairs, or rather festivals, which are held annually in January, April, and August in honour of a famous Moslem saint called Sid-Achmet the Bedoween, who flourished in the thirteenth century, and whose tomb and mosque form one of the prettiest and richest monu-

ments of their kind in Egypt. Each of these fêtes lasts eight days; and that in autumn especially attracts enormous crowds of both sexes, trade and religion then often combining to collect together as many as 500,000 dealers and pilgrims from all parts of the East. But the scene is distinguished rather by riot than piety, and recalls the worst revelries of Bubastis and Canopus. The tomb is jealously guarded by stalwart dervishes, and as (in the words of Clot Bey) the intercession of the saint "*passe pour donner la fécondité aux femmes,*" the spot is a favourite resort of pious ladies from whom Allah has withheld the honours of maternity, and whose grateful offerings on these occasions form a rich endowment of the shrine. Up to within a few years ago the slave-market was one of the chief sights of these fairs, but this has been suppressed by the Khedive, and the traffic in human chattels, though still privately carried on, is now contraband here as everywhere else throughout the country.[1]

Zagazig, with a population of nearly 40,000, ranks next in size and commercial importance. Its situation on the branch line which connects Benha—twenty-four miles off on the main Alexandria and Cairo railway—with Ismaïlia and Suez, and also as the junction-point of another line to Mansourah, renders it at once the centre of the trade of the surrounding district, and of the railway system of the eastern Delta. Its growth therefore has been rapid, and with the aid of a numerous and

[1] Three similar, though less famous festivals, are held at Desouk, in the neighbouring province of Garbyeh, in honour of Sheikh Ibrahim, a saint who ranks next after Sid-Achmet in the Egyptian calendar; as many in the province of Behéra, in honour of Sheikh-Attye-Abourrich; and four others in the province of Minieh, in honour of as many several santons of lesser repute. Weekly or bi-weekly fairs, for trading purposes only, are also held in most of the principal towns throughout the country.

enterprising colony of Europeans, it promises to become one of the largest and most prosperous towns of Egypt. The ruins of Bubastis are close by, and the fresh-water canal strikes the line at Ter-el-Kibeer, about sixteen miles farther east.

Although private manufacturing enterprise has not yet much extended above Cairo, the development of native industry within recent years has swelled the population of *Assiout*, the capital of Upper Egypt, from 18,000 at the death of Mehemet Ali to 27,500 three years ago. This pretty and thriving town, which occupies the site of the ancient Lycopolis, stands nearly a mile back from the left bank of the Nile, about 250 miles above Cairo, and is surrounded by one of the most fertile districts in the upper valley. It was here that the Mamlouk chiefs took refuge when driven from Lower Egypt, and for a time made a successful stand against Mehemet Ali. The town is connected with El-Hamra, its port on the river, by a fine tree-studded *chaussée;* and besides some other minor local industries is famous for its pipe-bowls, which compete throughout Egypt and the Levant with those of Constantinople itself. It is at present the southern terminus of the line of railway on the left bank of the Nile, which connects Upper Egypt with Alexandria, and, as mentioned elsewhere, is also the chief *entrepôt* of the caravan trade between Cairo, Darfour, and Sennaar.

Damanhour, the capital of the province of Behéra in the lower valley, thirty-eight miles from Alexandria on the trunk line to Cairo, had thirty years ago 9,000 inhabitants, but from being little more than a first-class village it has grown to be a prosperous town, with a population of 25,000. The surrounding district is one of the most richly cultivated in Egypt, and produces in

abundance cotton of the finest quality, for which the railway and the neighbouring Mahmoudieh canal afford cheap and ready means of transport.

Mansourah, an old town on the right bank of the Damietta branch, comes next in census rank, with a population of 16,000. It was here that St. Louis was defeated and captured by the Saracens in 1250, and tradition still points to an old ruin as his place of imprisonment till released on payment of a heavy ransom and the surrender of Damietta. The town, which is the capital of the province of Dahkalieh, is connected by railway with Cairo, Alexandria, and nearly all parts of the Delta, and with Lake Menzaleh, thirty-seven miles off, by a canal which is navigable half the year. Like Damanhour, its chief trade staple is cotton, but it also manufactures a considerable quantity of sail-cloth and other linen fabrics.

Kenneh, the capital of the province of Kenneh-Cosseir, in Upper Egypt, about a hundred and fifty miles above Assiout, forms the last town of which special note need be made. It stands in a couple of miles from the eastern bank of the Nile on a canal that connects it with the river, and being only about eighty miles from the Red Sea at Cosseir, has succeeded to Coft and Cos as the emporium of trade between the Saïd and the Arabian coast. It is for the same reason a chief rendezvous of Mecca pilgrims from the upper valley and the countries farther south. The town is now, as three thousand years ago, famous for its manufacture of porous water-jars and bottles, which are still in universal use throughout Egypt, and rafts of which floating down to Cairo and the Delta, form one of the picturesque features of the Nile navigation. Its population of 13,200 includes a numerous colony of *ghawázee*, or

dancing girls, of whom there is also a strong contingent higher up at Esneh. On the opposite bank of the river stands Dendera (Tentyra), whose Ptolemaic temple of Venus is one of the grandest and best preserved monuments of Egypt.

Of the other provincial capitals there remain to be more briefly mentioned—in Lower Egypt, *Shibeen*, chief town of the province of Menoufyeh, with a population of 12,400; *Benha* (5,200), capital of Galioubyeh; and Ghizeh (10,500) now rather a village than a town, but still capital of the *mudirieh* opposite Cairo, which gives its name to the Great Pyramids; and in Middle and Upper Egypt, *Beni-Souef* (7,000), a thriving town, capital of the province of the same name; *Medinèt* (about 12,000), capital of the Fayoum; *Minieh* (11,000), a large and prosperous town, *chef-lieu* of its province, about 160 miles above Cairo (150 by rail), where one of the Khedive's finest sugar factories is now carried on; *Girgheh* (2,000), formerly the chief town of the Saïd, and still the seat of the oldest Roman Catholic establishment in Egypt; it is now superseded as the provincial capital by *Sooháj*, a well-built and important town about twenty-five miles lower down; and finally *Esneh* (7,000), a chief emporium of the Upper Nile and Abyssinian trade, which also enjoys the repute of being the healthiest place on the river.

CHAPTER IV.

EGYPT AND THE PORTE.

The Problem of their Relation—The Conquest never Established Full Sovereignty of the Porte—Continued Power of the Mamlouk Beys—The French Invasion—MEHEMET ALI—Elected Viceroy—War with the Porte—The Treaty of 1840—His Subsequent Administration and Death—Ibrahim, Abbas, and Saïd Pashas—Accession of ISMAÏL, a New Epoch—Change of the Succession—"Khedive"—International Recognition of these Changes—Conflict of Juristic Opinion as to their Effect—*De facto* Establishment of an Arab Kingdom—"Egypt for the Egyptians"—Probable Outcome of the War—Independence or British Protection.

BEFORE proceeding to describe the administration and present condition of the territory and population thus noticed, it may be worth while to state briefly the elements of the problem involved in the international status now reached by Egypt and its ruler. We say problem, because not only is the relation of the Khedive to the Porte an anomaly in public law, but jurists differ in their estimate of its exact political effect, some regarding his Highness as virtually a sovereign prince, while others fail to see that he has advanced beyond the mere vassal rank of Mehemet Ali. A glance at the historical facts may help to suggest which of these views most nearly accords with the actual situation.

The conquest of the country by Sultan Selim I., in 1517, abolished the Mamlouk dynasty, but did not establish in its stead the full sovereignty of the Porte. The great military aristocracy of the Beys remained in unweakened force, and the conqueror was fain to conclude with them a regular treaty by which Egypt was constituted in effect a republic, feudally subject to the Sultan and his successors, but the government of which

was still left in the hands of the Mamlouk chiefs, acting as a council of regency under a Pasha, whose almost only function was to receive and remit to Constantinople the stipulated tribute, and who was himself deposable at will by this Mamlouk divan. The Beys also retained the right of electing their own chief, who, in concert with his fellows, levied taxes, maintained an army, coined money, and otherwise exercised supreme authority over the country.[1] Shadowy as was the sovereignty thus left to the Porte, it became if possible still more unreal during the domestic turbulence and foreign wars of the succeeding reigns, until, in 1763, the then dominant Bey refused payment of the tribute, expelled the resident Pasha, and proclaimed himself "Sultan of Egypt and Lord of the Two Seas." Although this revolt was not successful, the Porte gladly compounded the treason by re-confirming the disaffected chiefs in their old powers; and the deposition of its representative, by the simple fiat of the Beys, became thenceforward an incident of almost yearly occurrence. To this merely nominal suzerainty had the authority of the Sultan been reduced when, in 1798, the French invasion under Bonaparte for three years extinguished it altogether. After its re-establishment by the victories of Nelson, Abercrombie, and Sidney Smith, the authority of the Porte was more than ever disregarded by the Mamlouk chiefs, to such an extent that one viceroy was deposed and executed, and another—Khosrew Pasha, afterwards famous as Grand Vizier—made prisoner and shipped back to Constantinople. Now it was that MEHEMET ALI, the chief figure in modern Egyptian history, first appeared prominently on the scene. Born in 1768, at Cavalla in Roumelia, this

[1] Savary, *Lettres sur l'Egypte*, tom. ii., lettre xv. Gibbon, *Decline and Fall*, chap. lx.

remarkable man had a few years before these events been sent into Egypt, second in command of a company of Albanian irregulars, and after greatly distinguishing himself in several engagements, first against the French, and afterwards against the rebel Beys, he had won such popularity with the army and among the Cairene sheikhs that, in 1805, these together proclaimed him Viceroy, and the Porte, although even then jealous of his growing influence, and suspecting his ambition, deemed it politic to recall its own nominee and ratify the elevation of the young Macedonian brigadier.

How the new *vali* in turn baffled the intrigues of the Stamboul divan to effect his overthrow, how he made himself sole master of Egypt by exterminating the Mamlouks, rescued the Hedjaz from the Wahabees, organised a powerful army and navy on the European system, annexed the Soudan, conquered Syria, and, after annihilating the Turkish army at Koniah in 1832, would have carried his victorious standards to the Bosphorus if Russia had not interposed—need not here be narrated. Enough to say that the treaty of Kutaieh, concluded in the following year between the Porte and its great vassal, recognised the feudal sovereignty of Mehemet Ali over Egypt, Crete, Syria, and the large district of Adana, on the sole condition of his paying tribute. But the peace thus dearly purchased by the Porte was as brief as it was hollow. Fresh complications resulted in renewed war in 1839, when the total defeat of the Turks by Ibrahim Pasha, at Nezib, re-opened the defiles of the Taurus to the victors, and but for the speedy intervention of the European Powers would have again placed Asia Minor and Constantinople at their mercy. As if to atone for its apathy in 1832, the British Government now espoused the cause of the Sultan with especial

energy, and the operations of Stopford and Napier on the coast of Syria forced Mehemet Ali to surrender that province, and content himself with the international recognition of his own and his family's right to Egypt only. This was formally guaranteed by the treaty of 1840 between the Porte, Austria, Great Britain, Prussia, and Russia, and was further confirmed by the convention of the following year, to which France also became a party. The settlement thus ratified reserved to the Porte its old right of tribute, fixed the strength of the Viceroy's military forces, and imposed a few other restrictions; but, barring these limitations, Egypt became under it more than ever legally as well as practically self-governing, the order of succession being at the same time fixed in accordance with the imperial rule of descent to the eldest male of the family.

His title to Egypt having been thus affirmed by the public law of Europe, Mehemet Ali abandoned all idea of further aggrandisement, and devoted himself during the next seven years to the social and material improvement of the country, with an aggregate of results which has indelibly fixed his place in history as the "Peter the Great" of Egypt. Indeed, with the exception of some additions and further reforms made by the present Khedive, the whole administrative system of the country is his work; and, notwithstanding many admitted defects, how incomparably it is the most civilised and efficient of existing Mussulman Governments, the following chapters will aim at showing. In 1848, Mehemet Ali—then in his eightieth year—was attacked by a mental malady,[1] and was succeeded by his eldest

[1] He lingered in this state till August 2, 1849, when he died, leaving five sons—Ibrahim, Saïd, Hussein, Halim, and Mehemet Ali. A sixth, Ismaïl (the second in age), had been murdered during his father's lifetime

son Ibrahim Pasha, the hero of Koniah and Nezib. This prince however only reigned four months, and was in his turn succeeded by his nephew Abbas Pasha, a voluptuary and a bigot, during whose feeble and reactionary rule the prosperity of the country languished, and the Porte, taking advantage of his weakness, more than once stretched its prerogative beyond the limits of treaty right. To him, in 1854, followed Saïd Pasha, the third son of Mehemet Ali, an amiable and liberal-minded prince, who retrieved much of the mischief done by his predecessor, but lacked the vigorous intelligence and force of character required to give new impulse to the great work begun and so far advanced by his father. His reign will, however, be honourably remembered for the abolition of several mischievous Government monopolies established by his father, and maintained by Abbas, and, especially, for the concession and commencement of the Suez Canal. Saïd died in January 1863, and with the accession of his nephew, ISMAÏL PASHA, the second son of Ibrahim, a new epoch in the political and social history of the country begins.

Although the settlement of 1840–1 had made Egypt virtually independent, the official relation of its ruler to the Porte was still nominally that of a provincial *vali*, or governor-general, whose powers were indeed larger, but his grade little if at all higher, than that of the governor of Baghdad. In Constantinople he ranked

while commanding the first expedition to the Soudan; and a seventh, Toussoun, had also pre-deceased his father. Of the five who survived him. Halim Pasha, at present residing in Constantinople, is the only one now living. Ibrahim Pasha left three sons—Achmet, who was accidentally drowned in the Nile in 1859; Ismaïl, the present Khedive, and Mustapha Fazyl, who died in Constantinople in 1875. Toussoun Pasha left one son, Abbas, who succeeded Ibrahim Pasha in the Viceroyalty; and Saïd Pasha, who in turn succeeded him, also left one, Toussoun Pasha, who died last year. A note of the present viceregal family will be found in Appendix A.

after the Grand Vizier, of whom both Abbas and Saïd had more than once to acknowledge the precedence. Ismaïl, however, did not relish this wide disproportion between his nominal status and his actual power; and accordingly, soon after his accession, he began negotiations with Stamboul which in 1866 resulted in an imperial firman, by which, in consideration of the yearly tribute being increased from 376,000*l.* to 675,000*l.*, he received the title and rank of *Khédiv-el-Misr* (King of Egypt)—commonly called Khedive[1]—and the succession to the throne was made direct from father to son, instead of descending to the eldest agnate of the family of Mehemet Ali, as had been fixed by the treaty of 1840. But the old limitations of his prerogative as regarded the strength of the Egyptian army, the right of contracting foreign loans without leave of the Porte, and of concluding commercial treaties, still remained; nor was it till 1872 that these were removed by another firman, which—consolidating all that preceded it since the convention with Mehemet Ali—conferred on the Khedive every substantial attribute of sovereignty, except only the *jus legationis*, trammelled by the sole conditions of his paying the increased tribute, and lending the Sultan military aid in the event of war. It need hardly be said that these successive concessions cost the Egyptian treasury dear; every fresh step towards autonomy was, in fact, purchased from both the Sultan and his Ministers at an exorbitant price; and from Abdul-Aziz down to the fortunate aide-de-camp for whom court favour obtained the coveted mission of carrying each new *hâtt* to Cairo, heavy black mail was extorted by the whole. It was, indeed, notorious at Constantinople that during the six or seven

[1] Pronounced *Khideev.*

years over which these negotiations extended, the amount thus annually squeezed out of the Viceroy considerably exceeded the total of the fixed tribute. In the result, however, both these firmans of 1866 and 1872 were communicated to and approved by the Powers who were parties to the settlement of 1840–1, and the new relation established by them between Egypt and the Porte may, therefore, be regarded as having similarly received international sanction.

The status thus finally created was so anomalous that it might well divide juristic opinion. It differed in many points from, and in some rose much above, that of Tunis, Servia, and Roumania, no one of which enjoys—although the Bucharest Government has recently laid claim to—the distinctive sovereign right of concluding treaties. Yet while Martens, nearly ninety years ago, and Wheaton more than forty years later, placed the Danube Principalities—whose Hospodars were directly appointed by the Porte—even then among "semi-sovereign" states, Sir Robert Phillimore questions the right of Egypt even now to this rank.[1] The force of this later opinion is, however, weakened by the fact that so long ago as 1836 this eminent jurist constructively endorsed[2] Wheaton's recognition of the semi-sovereignty of Mehemet Ali, even before the hereditary title of the latter had been formally affirmed by the Powers; and again, in 1854, still more distinctly conceded[3] this rank to Abbas Pasha, although labouring under the erroneous impression that Tanzimat—the charter of reforms issued by the Porte in 1838—had been extended to Egypt, and that "so far the sovereignty" of the Viceroy had been "derogated from by the reservation" thus

[1] *The Charkieh*, L. R. (Admiralty), vol. iv. p. 59.
[2] *International Law*, vol. i. p. 117. [3] Idem, vol. 2.

made "to the Sultan of the power of life and death over the subjects of the Pasha." But no such derogation ever took place; for although the Porte addressed a *hátt* in this sense to Abbas Pasha in 1852, even that feeble prince refused to acknowledge the pretension; and the power of life and death over Egyptian subjects remained, as it still does, exclusively within the viceregal prerogative, without reference to the Sultan in any case. When, therefore, it is remembered that for all purposes of internal government and of externally pledging the national credit, the Khedive is now as irresponsibly absolute in Egypt as the Sultan is in Turkey—or even more so, since he is not trammelled by even a paper Constitution—it seems difficult to deny him the benefit of Vattel's doctrine that "where the payment of tribute and homage leaves independence and supreme authority in the administration of the State, and only means certain duties to the lord of the fief, it does not prevent the state of the feudatory from being strictly sovereign."[1] This is exactly the case of the Egyptian Government; and as the title of the Khedive to this "supreme authority" is indefeasible so long as the conditions of its tenure are fulfilled, his claim to sovereignty of at least the second rank is incontestable if this ruling of the great Swiss civilian be good public law. The right even of Mehemet Ali to this status was constructively affirmed by the French courts nearly fifty years ago;[2] and that of Ismaïl Pasha was similarly recognised by our own tribunals even before the last firmans had further ratified and increased his powers.[3] It is, however, fortunate for

[1] *Droit des Gens*, l. i., chap. 1. So too Grotius, b. i., chap. 3.

[2] The case of *M. Solon*, Phillimore's *International Law*, vol. ii., pp. 138—9.

[3] In the unreported case of *Melanidis* v. *Ismail Pasha*, tried in the Court of Common Pleas in June, 1866, and again in January, 1869.

those who have a material stake in Egyptian credit that both the rank and obligations of the Khedive and his dominion depend rather on accomplished and accepted facts—the ultimate title in politics as in common life—than on the conflicting *dicta* of jurists. Already, the foundations of an Arab kingdom, as distinct from Turkey in all but the temporary incidents of tribute and military aid as Portugal is from Spain, are laid beyond reasonable fear of disturbance from any possible outcome of the Eastern Question; and in view of this fact, which is now tacitly recognised by all Europe, it is idle any longer to regard Egypt as

"A patient province of the Great Mogul."

Fifty, or even thirty, years ago there was still an influential "Ottoman party" in the country, but hardly the tradition of this now survives. Among the peasantry, too, the more or less active sentiment of loyalty to the Porte which then prevailed has similarly died out—yielding to a personal sense of an exorbitant tribute for which nothing has been received in return, and of yet heavier extortions, which, though recorded in no budget, have been known to and felt by every Fellah between Assouan and the sea. With few (and certainly unconfessed) exceptions, "Egypt for the Egyptians" is now unmistakably the national aspiration, and no one who knows the country can doubt that, if the Khedive were to proclaim his independence to-morrow, he would be supported by every class of the population. At the same time, the totally distinct sentiment of religious fealty to the Caliph has lost none of its force, and in any struggle involving positive peril to *Islam*—not merely political danger to the Porte—the Arab would infallibly make common cause with the Turk—just as Ireland, if there were no Foreign Enlistment Act, would similarly

help the Pope. But this impulse of religious sympathy would be quite as strong with both Khedive and Fellah if the political tie between the two countries were completely rent, and conflicts in no way with the other logic of events which points clearly to that inevitable and not distant consummation. The generous loyalty with which the Porte's requisition for a contingent has recently been responded to argues nothing against this view of the *set* of national feeling, nor will it retard by a day the shuffling off of the tributary yoke. It would as yet be premature to forecast the outcome of the present war to any of the interests concerned; but nothing can be more certain in unaccomplished event than that, suffer who may, Egypt will be a gainer in the result. If the Porte escape heavy loss and humiliation, the Khedive will have earned the right to new concessions, tending to sever the few remaining fibres of the thread that still binds him to Stamboul; while in the worst event of Turkish dismemberment, he may safely count on emerging from the general wreck, piloted by British friendship, it may be into complete independence, or at worst —or best—exchanging the costly suzerainty of the Porte for the fostering and disinterested protection of Great Britain.

CHAPTER V.

ADMINISTRATION.

L'État, c'est le Khédive—Council and Ministers merely Executants of his Will—His Early Life—After his Accession—Abdeen—Routine of his Highness's Daily Life—His Personal Character—The Ministries—The Late Moufettish—His Inordinate Power—The Present Ministry of Finance—of Foreign Affairs—of the Interior—of War and Marine—of Commerce—of Public Works and Agriculture—of Public Instruction and the Wakfs—The Custom House and Post Office—Provincial Administration—Mudirs, Mâmours, Nazirs, and Sheikhs-el-Beled—The Chamber of Delegates—Character of Egyptian Officials.

BASED on the treaties, firmans, and accomplished facts noticed in the previous chapter, the present Government of Egypt consists of—the Khedive. The formal work of administration is carried on through a Privy Council and eight Ministers, nearly as originally organised by Mehemet Ali, who in the machinery of government as in most else revolutionised everything, and introduced a system of Ministers—as of infantry and artillery—fashioned chiefly after European models. But in the hands of the present sovereign, as in those of his grandfather, councils and ministers are the mere agents of his personal will, without responsibility—except to himself—as without power.[1] From the negotiation of a treaty or a loan, to the approval of a contract for coals or machinery, he is cognisant of every detail of public business, and nothing above the importance of mere departmental routine is done without having first passed under his eye. His relation to and action upon the whole administration are, in fact, as direct as those of

[1] To this rule the gradually usurped semi-independence of the late Ismaïl Pasha Sadyk, in the Ministry of Finance, has been the only exception.

an English cabinet minister to and upon his own special branch of the public service, with the difference that, while the latter is responsible to Parliament and is largely dependent on a staff of permanent subordinates, the Khedive—barring only in what concerns foreigners—is simply absolute. In a word, from Alexandria to Wady-Halfa, beyond which he has delegated his authority to Gordon Pasha, his Highness not only reigns but governs.

The Prince who thus holds the whole reins of Egyptian administration in his own hands is, after Mehemet Ali, the most striking individuality in the modern history of the country. Born at Cairo in 1830, he inherited all the inexhaustible energy of his grandfather, without the sterner qualities of his father Ibrahim; but at an early age this was moderated by an excellent European education into an intellectual activity which, combined with real ability, soon after his return from Paris in 1849, made him the most prominent figure in Egyptian society, and quickly excited the jealousy of Abbas Pasha, who had then recently succeeded to the viceroyalty. As chief of the *parti des princes*—a sort of family "opposition" formed against Abbas—he became especially obnoxious to that indolent but vicious bigot, who accordingly endeavoured to crush him by fabricating against him a charge of murder, the failure of which only reacted on its author, and rendered Ismaïl more influential than ever. On the accession of Saïd Pasha, in 1854, he at once received a portfolio, and after having been sent to Paris and Rome on special missions, he acted as Regent during his uncle's pilgrimage to Mecca in 1861 and his subsequent visit to Europe later in the same year. Early in 1862, he went to the Soudan as commander of an expedition sent to

suppress an insurrection in the Upper Nubian provinces, and by a combination of tact, energy, and mercy, he completely succeeded with hardly any bloodshed. Saïd Pasha died on January 18th, 1863, and the destinies of Egypt passed into the hands of the Prince who had thus so well earned his spurs, and has since so enormously increased both her trade and her debt.

He had already a definite policy of government, and in replying, on the morrow of his accession, to the congratulations of the foreign diplomatic agents, he indicated its chief lines by promising an improved and liberalised administration, and the energetic promotion of the material interests of the country. If, in the one important matter of finance, "the ample proposition that hope made" has, till lately, "failed in its promised largeness," it will be seen how substantially, in nearly all else, the pledge then given has been redeemed. Indefatigable energy, sound judgment, and administrative ability, applied to the management of his private estates, had already made his Highness the wealthiest landowner in Egypt, and the same qualities now exerted in the higher work of governing the country, speedily bore corresponding fruit in the extension of public works, the growth of the revenue, and the rapid expansion of both the inland and foreign trade. Saïd Pasha had irretrievably committed the Government to the Suez Canal, but the new Viceroy promptly repudiated one most mischievous obligation imposed by that—for Egypt—disastrous concession, by stopping the monthly conscription of 20,000 men, which, at ruinous cost to the country, supplied M. Lesseps with *corvée* labour for his work. He had, indeed, to make heavy compensation for this act, equally of humanity and sound economy; but the relief to the Fellahs was immense, and its effects were

soon visible in extended and more productive cultivation in all the districts from which this army of forced labourers had been drawn. His zeal, however, for material progress carried him farther and faster than the resources of the country could profitably bear, concurrently with other heavy drains. Commerce and revenue developed rapidly, but canals and railroads outstripped both, and continued expenditure for the same purpose—supplemented by further large disbursements for the Suez Canal, by black mail to Stamboul, and usurious interest on every borrowed pound—gradually swelled the small debt-legacy left by Saïd Pasha into the bloated total that now half smothers Egyptian credit. But, personally, the Khedive has been much less to blame for this result than it has been the fashion to assume, and succeeding chapters will show how entirely he is to be credited with the enormous material development that can, in any case, be set against it. The bad inheritance of the Canal, which preponderant French influence rendered so costly, was no fault of his; and as little could he resist, or be held responsible for, the forced donatives to Constantinople which annually exceeded the treaty tribute. It may be said that with these inevitable drains on the Treasury he should have spent less on public works; but if he had done so, Egypt would be still pretty much where Saïd Pasha left her; whereas she now possesses railways, new canals, docks, harbours, and telegraphs, which, in respect of these potent aids to national progress, place her a-breast of most second-class European States, and which, at all events, have cost more than the net proceeds of her whole foreign debt. The shortest sketch of his Highness's personal share in the administration, and of the average measure of official work he labours through almost every day of the year,.

will dispose of another common fallacy—that his life is that of a modern Sardanapalus.

The various Ministries are scattered within a radius of less than a mile from the palace of Abdeen, where the Khedive now generally resides, except during the hottest weeks of summer, when he crosses to Ghizereh, on the western bank of the Nile. Abdeen itself is a spacious but architecturally modest building, one wing of which is wholly devoted to Government offices, and to the reception-rooms in which his Highness gives occasional dinners and concerts to the official and other foreign society of Cairo and Alexandria. In this, too, is the small suite of apartments on the first floor, in one of which his Highness transacts business and receives his visitors, within call of his private secretary in an adjoining cabinet, and of a couple of Arab *chasseurs* on the stair-landing outside. The chamber has no pretension whatever to splendour of furniture or decoration, a thick Persian carpet, a damask-covered divan, a few chairs upholstered to match, with window-curtains of the same material, half a dozen crystal sconces round the arabesqued walls, and a small gilt table behind which the Prince himself sits, forming the *ensemble*. Here his Highness takes his place every morning about eight o'clock, and receives first his sons—who are now respectively President of the Privy Council and Ministers of Finance, War, and Public Works—and, after them, such of the other Ministers and chief functionaries as may have occasion to consult him or have been summoned to an audience. Then, on till noon, follow receptions of the Consuls-General and such other foreigners as have, or have not, received Consular introduction, and desire to see the great man either to gratify a traveller's curiosity or to propose a contract.

At noon—which is announced by gun-fire from the Citadel—his Highness retires for an hour to breakfast, and thence afterwards, except on the rare afternoons when he takes a couple of hours' drive in a modest two-horse brougham or barouche down the Shoobra or Abbasieh road, he is again at his post, giving more audiences and transacting every sort of miscellaneous business till 7 p.m., when another hour is given to dinner, after which, if the day's work has been got through, he spends two or three hours, either back in the same room or out on the balcony in the balmy Cairene night, smoking and chatting affably with such of the Ministers or others who have the *libre entrée* as may drop in, and then to bed about eleven o'clock—or, if there be still business to be done, he again works at it from after dinner till midnight, or even later, with the whole staff of secretaries, chamberlains, and other officials kept at their posts till he finally retires for the night. During the twelve or fourteen hours thus given to positive work for certainly more than 300 days a year, there is, as has been said, hardly a detail of public business above the merest routine on which he is not consulted, and that he does not personally direct. He is, in fact, both sovereign and Minister in one—seeing everything, knowing everything, and ordering everything, for himself; the titular heads of departments being merely so many *chefs de cabinet*, who do little more than register and execute his will.[1]

The readiness with which his Highness receives

[1] Besides the Ministers, there are also the members of his Highness's official household:—Khaïri Pasha, Keeper of the Seals; Zecchi Pasha, Grand Master of the Ceremonies; Tonino Bey, assistant do.; Murad Pasha, first Aide-de-camp; Abduljelil Bey, chief of the Private Cabinet; Barrot Bey, Secretary for the European Correspondence; and Dr. Burguières Bey, private physician.

almost everybody is one of the incidents of a visit to Cairo that most surprises and gratifies a stranger. You inscribe your name in a visitor's book in the room of the Assistant-Master of the Ceremonies down-stairs, and if you have the shadow of a fair pretext for an audience you are either ushered up after a short delay, or a time is fixed for your reception later. His Highness speaks French like a Parisian, and receives his visitor with a courtesy and affability that at once set him at his ease, rising as he approaches, and motioning him either to a seat on the divan or to a chair near his own, according to the measure of consideration intended to be shown. Be you engineer, merchant, journalist, politician, practical agriculturist, or almost no matter what else, you will soon feel that you have met your match in special intelligence and information; while as regards Egypt itself, you will find that his Highness understands absolutely everything, from the niceties of its relation to the Porte to the best rotation of crops or the latest Liverpool price of "Fair Middling." How he has found time to acquire this encyclopædic information is a marvel; but there it is on almost every subject, as if he were a specialist in each. The audience over, you retire with the compelled conviction that if an "intelligent despotism" be under any circumstances the best form of government, Egypt could not well have a better autocrat than her present Khedive. You carry away, too, the feeling, that practically acute as he may be in all the details of business, the man is essentially a *grand seigneur*, full of a high personal pride, and animated by a dynastic ambition which is but thinly veiled by the tone of loyal respect in which he always speaks of the Porte. His Highness is now in his forty-seventh year, below the middle height, stout though not at all un-

wieldy, and with nothing of an Eastern but the native dignity, in his easy and polished manners. "But (quite accurately wrote a recent interviewer) the eye is still clear and bright, and the mouth and jaw are those of a strong and determined character." There is essentially nothing weak about the man himself, and, whatever may be its other defects, weakness is also assuredly the last term that can be applied to his administration.

The rule thus exercised is obviously much more personal and autocratic than that of either Sultan or Czar. It would be easy to indicate its disadvantages; but on the whole it is suited to the country, and it may be doubted if ever in modern times Egypt has been so well governed as at present. The central machinery through which his Highness works comprises, as has been said, a Privy Council (*mejlis khossoussi*) and eight different Ministries. The first of these, over which Prince Mehemet Tewfik Pasha, the heir-apparent, presides, consists of the Ministers and eight or nine other high functionaries, including the Sheikh-ul-Islam, who is now no longer sent from Constantinople but, like the chief Cadi, is named direct by the Khedive from amongst the native Ulema. The functions of the Council are to examine and report to his Highness on the budgets and other measures of the various departments, and to act generally as a court of administrative review, whose decisions, when confirmed by the Khedive, are final. Its duties and powers are closely analogous to those which in Russia are divided between the "Council of the Empire" and the "Directing Senate," the ultimate executive authority centring at Cairo, as at St. Petersburg, in the sovereign,—with the personal difference only that in the latter the "Private Cabinet" relieves the Czar of the work which in Egypt is done by the Khedive himself.

Of the Ministries, that of Finance acquired an altogether preponderant rank and power under the late Ismaïl Pasha Sadyk. For four or five years preceding his fall, the "Moufettish" had been virtual Grand Vizier of Egypt, the one exception among his colleagues who—so great was his personal influence with the Khedive—acted in his own department almost independently of his master, and usurped a right of interference in almost every other. Although the provincial administration is properly under the Minister of the Interior—then and still Prince Mehemet Tewfik Pasha—Ismaïl Sadyk virtually named every governor and sub-governor and most of even the lower officials throughout the country, levying black mail from each on his appointment, and exercising nearly absolute authority over the whole up to the day before his fall.[1] In every despotic Government the Minister who holds the national purse-strings must necessarily wield an exceptional influence; but in this case influence had grown into almost independent power, and, as Sadyk wished, so his master permitted it to be in nearly the whole financial administration of the country. Originally a fellah himself, his knowledge of the class enabled him to squeeze revenue out of them when every one else failed, and from Alexandria to Khartoum his name had become feared hardly less than that of the Khedive himself. The financial mal-administration of recent years was, therefore, almost entirely his personal work; and more than one loan-monger could testify to bribes offered and

[1] So paramount indeed had this gradually usurped authority become that, a few months previously, the harbour-master of Rosetta, who owed his appointment to the Moufettish, refused to obey an order of the Khedive removing him from his post for misconduct, and was only ousted by a guard of marines under M'Killop Pasha, acting under his Highness's sign-manual.

accepted which would sufficiently explain the onerous terms on which their successive operations were carried through. So intelligent and autocratic a ruler as the Khedive cannot escape all share of blame for the result; since he must have either directly or tacitly approved the action of his Minister, and in either case must be held ultimately responsible for it. In Alexandria and Cairo, however, it was none the less notorious that the prime author of and profiter by the system of financing which so disastrously affected Egyptian credit was the Moufettish himself; and his sudden fall in November last was, therefore, interpreted as a break with that vicious policy, and has since in fact been followed by a radical change in the character as in the *personnel* of the Treasury administration. This last now consists of Prince Hussein Pasha, the second son of the Khedive, as Minister, assisted by a *wekil*, Omer Pasha, for the routine work of the department; of a Finance Committee, comprising the Minister and two English and French Controllers-general[1] (whose functions will be described in detail in a subsequent chapter); and of a Public Debt Commission—composed of foreigners[2] recommended by their respective Governments—which receives and applies the revenue assigned for payment of the debt annuities. The Minister himself, though only in his twenty-fifth year, has already had considerable official experience, and, to a large share of his father's energy and ability, adds the advantages of a very complete European education. Thus organised, the department is practically administered by high-class

[1] At present Mr. Romaine, C.B. (with Mr. Gerald Fitzgerald, an ex-Indian official, as his deputy), and Baron de Maloret.

[2] Major Baring (English), M. Bligorière (French), Herr Cremer (Austrian), and Sig. Baravelli (Italian).

European functionaries, and it is hardly too much to say that, if these do their duty, it offers nearly as effective guarantees for the control of the national revenue as our own English Exchequer.

The Ministry of Foreign Affairs ranks next, rather in accordance with the grade of this department in other Governments than, as yet, from the importance of its particular functions. As Egypt does not yet enjoy the *jus legationis*, she maintains no political agents abroad, and the foreign Powers are represented in Cairo only by Diplomatic Agents and Consuls-General, whose chief duties relate to trade and the "protection" of their resident countrymen under the still technically surviving Capitulations.[1] But here again, although all purely formal business of this kind passes through the Ministry, every matter of the least importance is discussed and settled by the Agents directly with the Khedive himself. With this department has recently been associated the Ministry of Justice, to which the opening of the new international courts has given increased importance. It also exercises administrative control over the native tribunals, the machinery and procedure of which have been greatly improved during the past two or three years. The use of the new European code compiled for, and now followed by, the international courts is being gradually introduced, Christian evidence is everywhere received, and altogether the work of native judicial reform is making real progress. The actual Minister of the joint departments is Sherif Pasha—by birth a Circassian—who last year replaced Nubar

[1] Besides the Hon. H. C. Vivian, H.M. Diplomatic Agent and Consul-General at Cairo, we have a Consul and Judge (Mr. Cookson) and two Vice-Consuls (Messrs. Calvert and Arpa) at Alexandria; a Legal Vice-Consul (Mr. Wallis) at Cairo; a Consul (Mr. West) at Suez; a Vice-Consul (Mr. Percival) at Port Saïd; and a Consular Agent at Mansourah.

Pasha, after having previously held several other high posts. Like most of his present colleagues he was educated in Europe, and in language, manners, and religious liberality, is a Parisian *jusqu'au bout des ongles*. His wife is the daughter of the famous French Colonel Séve, who entered the service of Mehemet Ali, and, as Soliman Pasha, Europeanised his army, and afterwards played a prominent part in his campaigns against the Porte.

The Ministry of the Interior—of which the heir-apparent is the present titular chief—is charged with the general provincial administration, and, except where crossed by the Treasury in matters relating to the revenue, and by the Ministries of Justice and Public Instruction in what concerns the native tribunals and the schools, exercises authority over all mudirs, sub-governors, and other provincial functionaries, subject only to the direct *ingérence* of the Khedive himself in every matter of importance. His presidency of this department for the past five or six years has given Prince Mehemet Tewfik valuable training in the work of practical government, and the intelligent industry with which he labours daily at its duties augurs well for his discharge of higher functions when his turn for them comes. He speaks and writes French like a Frenchman, and is perfectly conversant with European politics and general affairs.

The Ministry of War, under Prince Hassan Pasha,[1] his Highness's third son—of whose general and professional education it is enough to say that he is an

[1] This young Prince, who speaks and writes English perfectly, went through a regular University course at Christ Church, and afterwards worked his way up from a sub-lieutenancy to field rank in the Prussian Guards. He has the reputation of being a thorough soldier, and as a professional administrator has already shown high ability.

Oxford D.C.L., and a major in the Prussian army—disposes of a budget of nearly 800,000*l.* a year, and is, therefore, the most costly, if not the most important, branch of the Egyptian public service. The army has been no exception to the general growth which has characterised nearly all the interests of the country during the present reign. At the death of Saïd Pasha its peace strength had fallen to 3,000, and its nominal war footing to 15,000 men. One of the first cares of the present ruler was to reorganise this poor force, and to increase it to the full effective of 18,000 men, stipulated by the convention of 1841. Later, in 1866, a new firman authorised his Highness to raise this maximum to 30,000, which was further increased by an ingenious short-service system, under which more than half the force, after being thoroughly drilled, was sent home on unlimited furlough and replaced by fresh recruits, who in turn, after a year or eighteen months' service, were similarly relieved by others. In 1872, however, all limitation of his Highness's military prerogative was removed, and, with these ample reserves to fill up its cadres, the force was soon raised to an effective of 30,000 men, which may now be regarded as its average peace strength, although at present less than half this number are actually with the colours.[1] As now organised, the regular army consists of 18 regiments of infantry (two of which are negroes from the Soudan) of three battalions each, and of four battalions of rifles distributed among the 4th, 8th, 12th, and 16th regi-

[1] Only two of the eight companies of each infantry battalion are kept under arms, the others being away on unlimited leave to attend to their farms. [Since this was written a contingent of 15,000 men, under the command of Prince Hassan, has been sent to aid the Porte against the Russians, a special "war tax" for its equipment and support having been voted by the Chamber of Delegates.]

ments; of four regiments of cavalry, of six squadrons each; of four regiments of field artillery of six batteries each—two mounted and four on foot, and of three regiments of garrison artillery, and three battalions of pioneers. The number of men in these regiments and batteries varies with the exigencies of the service, and (it may be added) with the state of the military chest. But although not more than 20,000 may now be with the colours, the regimental cadres of commissioned and non-commissioned officers are kept up for an army of 80,000 men of all arms, to which effective strength the force could be raised within a couple of months. The infantry is armed with Remington rifles, of which 200,000 additional stand are in store); the cavalry partly with revolver and lance, and partly with sabre and carbine; the field artillery with 100 Krupp and 50 smooth-bore guns, and the garrison batteries partly with Krupp and partly with 8 and 10-inch Wahrendroff guns—besides which there are nearly 300 smooth-bore pieces available for field and garrison service. The powder-mills and cartridge factories near Cairo, furnished with the best modern machinery, provide an ample store of ammunition for these various arms of the service, and so render the whole practically independent of a foreign supply. In addition to this full war strength of the regular army, there is a reserve of about 30,000 men, who have served actually or on furlough, their full time with the colours—five years in the infantry, six in the cavalry, or seven in the artillery, but are liable to seven years' further service as *rédifs;* and an irregular, or bashi-bazouk, contingent of 60,000 mounted Bedoween under their own chiefs, who, like the Russian Cossacks, find their own arms and horses. This considerable army is recruited by conscription—

not by fixed annual contingents, but by irregular levies every two or three years as men are required—to which all Egyptians, of whatever rank or religion, are liable. The inhabitants of Cairo and Alexandria, like those of Constantinople, are exempt in virtue of an old chartered privilege. But payment of a special annual tax also exempts any particular family, and for a moderate sum any recruit may purchase his discharge after a year's service, but he is still liable to enrolment in the reserve. Unlike the Turkish army, therefore, that of Egypt includes Mussulmans, Christians (of two or three sects), and Jews; and so practically solves the problem of mixed military service which has professedly so much embarrassed the Porte. The various creeds are found to "regiment" in perfect harmony, and in respect of treatment and promotion no difference whatever is made between them. The chief weakness of the Egyptian army is, however, its still defective organisation, notwithstanding the considerable improvement that has been effected in this direction since 1872, and, what would be nearly fatal to its efficiency in service anywhere out of Egypt—its complete want of military train. Not only, too, are there no distinct territorial commands, but in practice there is no organisation into brigades and divisions. It has, nevertheless, one great advantage over the Turkish army, in that the whole of its officers have received a thorough professional education—first in the Polytechnic, and then in the strictly military schools in Cairo, through which every one of them must creditably pass before receiving a sub-lieutenant's commission. Every subsequent step of promotion also involves a distinct examination, which the son of even the most influential Minister cannot shirk. There is thus not now an illiterate officer in

the whole Egyptian army, while they may still be counted by scores in that of the Porte. Even in the non-commissioned ranks, also, every corporal must at least read and write, and must similarly pass a higher examination before he becomes sergeant. The drill and tactics of the whole force are French, modified within the last three or four years by such changes—taught by Prussian instructors—as the French themselves have adopted from the Germans since the war of 1870. Several American officers, the remains of a numerous staff engaged shortly after the close of the Confederate war, are still in the pay of the Khedive; but excepting General Stone, who as Chief of the Staff has rendered good service in improving the organisation and equipment of the army, and General Loring, who has charge of the forts along the Mediterranean,[1] they occupy only subordinate posts, and can hardly be said to be actively employed. The present commander-in-chief is Ratib Pasha, a Circassian, who succeeded Prince Hassan on the translation of the latter, last year, to the Ministry of War.[2]

Since the *veto* put by the Porte, during the jealous Vizierate of A'ali Pasha, on the Khedive's possession of ironclads, the Egyptian navy no longer reckons in any estimate of the country's military resources. A Ministry of the Marine is, however, still kept up—the present chief of which is Kassim Pasha—but as the cost of the service is comprised in the Budget of the Ministry of

[1] These include a chain of forts from Adjenir and Marabout Island, west of Alexandria, eastwards to Aboukir Bay, Rosetta, and Damietta, as also the large forts Napoleon and Capperelli, built by the French during their occupation of Alexandria, which are now all armed, mostly with heavy Krupp guns, capable of giving an excellent account of all but the most powerful ironclads.

[2] In Appendix D will be found a table of the various grades, with their European equivalents, and rates of pay in Egyptian pounds and piastres.

War, it cannot be separately stated. The present small fleet (all wooden and unarmoured) consists of two screw-frigates, a couple of corvettes,[1] four gunboats, two sloops, and one despatch-boat, besides three large Viceregal yachts which also fly the naval pennant. The whole of these vessels are now of little value except as transports—a service of which happily Egypt has little need, and for which the vessels of the governmental "Khedivieh Steam Navigation Company" would at all times suffice at less cost to the State. This latter enterprise is the outcome of a previous one called the "Azizieh Misri Company," which, originally formed as a joint-stock adventure in 1862, was bought up seven years later by the Government, and has since been continued under its present name as a commercial and mail service in the Mediterranean, the Red Sea, and (during the winter season) on the Nile between Cairo and Assouan. The seagoing fleet of the Company consists of twenty vessels, ranging in size from 1,900 to 400 tons register; of these, ten work a regular service between Alexandria and Constantinople, touching at the other chief ports of the Levant, and for both cargo and passengers compete not unsuccessfully with the vessels of the French Messageries and the Austrian Lloyds. Most of their commanders and all their pilots are Europeans, and their engineers Englishmen, who receive the same scale of pay and allowances as those of the Peninsular and Oriental Company's fleet.[2] A similar fortnightly or monthly service (according to the season) is maintained in the Red Sea, between

[1] A third, the *Latif*, was accidentally burned at sea in March last, about 60 miles south of Suez, while on a voyage up from Massowah.

[2] Since the outbreak of the war this Mediterranean service of the Company has been suspended. Exclusive of these Khedivieh steamers, the Egyptian mercantile marine consisted in 1875 of one other steamer, twenty-six sea-going sailing vessels, and 115 smaller coasters.

Suez, Djeddah, Souakim, Massowah, and (infrequently) Aden, Zeyla, and Berbera, while from November till March, a Nile passenger boat leaves Boulak fortnightly for Assouan, making the run to the Cataract and back in three weeks.

The Ministry of Commerce is a creation of last year, when, in view of the great development of commerce and of the felt want of a better system of trade statistics and administrative organisation, the Khedive decided on forming a new department, nearly on the model of our British Board of Trade. All commercial business had previously been under the control of the Ministry of Foreign Affairs, but was then transferred to a special Minister, assisted by two English officials recommended to his Highness by our Foreign Office. One of these appointments was not a success, and has since terminated in the resignation of the gentleman concerned; his colleague (Mr. Acton) has also been transferred to other functions, but has been replaced by Mr. Noel Malan, another ex-officer of the Board of Trade, who is rendering useful service in the direction of the foreign section of the department. Raghib Pasha, the new Minister—by birth a Sciote Greek, sold into Egypt after the massacre of 1822—is said to be an able administrator, and enjoys a high personal character. He has, however, the disadvantage of being the only holder of a portfolio who does not speak English or French,—Greek, Turkish and Arabic being the only tongues he knows.

Public Works and Agriculture form a joint department, nominally under Prince Ibrahim Pasha, the fourth son of the Khedive, but in reality administered by his *mustéchars*—Ali Pasha Moubarek, for Public Works (of which also he is chief engineer), and Moukhtat Pasha for Agriculture. The first section of this ministry

has charge of all the canals, telegraphs, bridges, river embankments and Upper Egypt railways—those below and east of Cairo being now controlled by the new special administration—while the latter exercises such supervision over the methods of husbandry and the distribution and rotation of crops as can be officially brought to bear on the staple industry of the country. Ali Pasha Moubarek received a very complete education in the École Polytechnique of Paris, and is said to be a clever practical as well as theoretical engineer.

Until last year the Ministries of Public Instruction and the Wakfs were similarly united under one chief (as they still are under the same roof), but the departments were then separated, and Riaz Pasha was named Minister of Education, with Hussein Pasha Fehmy as Director of the Wakfs. In another chapter some account will be given of the present state of public instruction in Egypt, and it will suffice therefore to say here that, while the primary credit of the great progress made during recent years is due to the enlightened liberality of the Khedive himself, very much of it has also been immediately owing to the intelligence and administrative ability of the present Minister and his predecessor (Ali Pasha Moubarek) and of their indefatigable inspector-general Dor Bey, a Swiss gentleman of long educational training and experience, who is perhaps the ablest European specialist now in the Egyptian service. It is, however, to be regretted that the economies compelled by last year's financial reforms have extended to this department, involving a reduction of nearly 10,000*l.* in its budget, which, though generously supplemented from the privy purse of the Khedive, can still badly afford the retrenchment. The Ministry of War could have better spared the amount, but in the

present political situation its particular estimates are not likely to be cut down.

The sub-departments of the Customs and the Post Office are the only other branches of the central administration that call for special notice. Up till last year, the reforms in the organisation and working of the former of these did not keep pace with its increasing revenue importance. Some few checks on fraud had indeed been introduced, but, barring these, the personal machinery and the system of accounts remained very much as Mehemet Ali left them thirty years ago, when the trade of the country was less than a fifth of its present total. When, therefore, introducing a large European element into the administration, the Khedive decided on applying the reform in full to this department, and—as in the case of others—requested the English Foreign Office to send him a thoroughly able officer to reorganise and assume the control of the whole service. Mr. Scrivenour, an experienced functionary of the London Customs, who had already fulfilled similar missions with success in Portugal and Brazil, was recommended to his Highness, and in October last undertook this new labour of Hercules—for such the chaos and organised corruption which he soon discovered showed it to be. The old (but not exclusively) Eastern system—carried to its extreme by the late Moufettish—of selling all such posts to those who paid highest for them, or who could command the most backstair influence, had long been followed in this branch of the service, without even a pretence of reference to the fitness of the nominee, and with all the resultant abuses that might be expected. The nominal salaries of the whole staff, from the chief director to the lowest searcher, were absurdly low, but the understanding was clear—

and, it need hardly be said, acted upon—that, to say nothing of direct peculation of the revenue, a fraudulent form of perquisite called "extra money" and the time-honoured *backsheesh* should make up for the poor official pay. This "extra money" payment has a precedent in the practice of Western Custom-houses, where an additional but regularly tariffed charge is made for attendance at extra-official hours and other special facilities in the clearance of goods; but in Alexandria it was made to cover gross frauds on the revenue, for which the merchant was morally quite as much to blame as the dishonest official. Thus, to illustrate the common practice by an incident of actual occurrence: it was till lately an every-day matter to declare and pass, say, a case of silk worth 300*l.* as one of cheap cotton stuff worth 30*s.*—a "facility" for which the importer paid a bribe of a sovereign to the examining officer, instead of a proper duty of 23*l.* 18*s.* to the Treasury; and so in countless other analogous cases. *Backsheesh*, again, similarly covered unfair preferences in the clearance of goods,—those who paid most having a first turn without regard to the time of landing, and obtained an under-valuing (the duty on imports being nearly in all cases *ad valorem*) proportioned to the bribe given. Nor was this all: to these purely administrative abuses, *smuggling* added another heavy source of fraud on the revenue; and here the new director encountered not merely native dishonesty, but the now gross anachronisms of the Capitulations and the more modern "treaty rights" of foreign residents in the country—as abusive as anything in the old conventions. In Turkey, where the same Capitulations and treaties are in force, the Customs authorities have and practise the right of visiting all vessels entering Ottoman harbours, and of keeping officers on board till

their cargo is landed. In Egypt, on the contrary, Consular usurpation has overridden this prerogative, and the Customs agents can only watch the discharge and seize the contraband stuff when it is actually on shore. For not only are foreign ships exempt from search, but the privilege is claimed by the Consulates even for fishing-boats registered as such in Egypt, and for common shore boats owned by Maltese, Greeks, Italians, *e tutti quanti*, by whom this illicit trade is chiefly carried on. The result has been an amount of smuggling, especially of tobacco, almost under the very eyes of the helpless native authorities, which has had probably no parallel anywhere in Europe. Nor has this been at all confined to the harbour of Alexandria. In the absence of anything worth the name of a coastguard, cargoes are constantly landed in broad daylight at points along the extensive line of coast, or passed over the Syrian land frontier, and—with in many cases the connivance of the native officials—are "run" into the nearest town without paying toll to either Customs or octroi. Foreigners, again, who grow tobacco in the country claim exemption, under the Capitulations, from paying the special taxes levied on the crop from native farmers, and so further contribute to the heavy deficit that has hitherto resulted in the revenue estimates for this particular article. Another fruitful source of abuse has been the system on which the accounts of the department have been kept—perfect in their caligraphy and tabulation, but intricate in a fashion which only their Coptic keepers could understand, and which made easy the concealment of almost any fraud. In this respect, as before remarked, no improvement has been effected since, nor probably from long before, the days of Mehemet Ali; so that, what with the abuses just noted which have kept revenue

out of the department, and this clerical means of glossing over frauds committed in its actual receipts, it is not to be wondered at that the Customs revenue of the country has not grown *pari passu* with its general material development.

But these were only some of the time-consecrated abuses of the service with which the new English director had to grapple on entering office in November last. He received, however, full powers from the Khedive, and has since been loyally supported by his Highness in carrying out the needful reforms,[1] with the result that great improvement has already been effected in the constitution, working, and fiscal outcome of the department. After fully acquainting himself with the situation, he dismissed a host of corrupt or incapable employés, and replaced them by fewer but carefully chosen and better paid substitutes; introduced an efficient system of checks; and proclaimed open war against smuggling, both in the harbour of Alexandria and along the coast. In the matter of accounts, the old system has been greatly simplified; and for the first time in the history of the service, receipts are given for all moneys paid, and a rigorous daily audit made of the whole, so that a fraud can now be at once detected and traced to its source. But correction of abuses within the department has been much easier than suppression of contraband outside, and in this Mr. Scrivenour has had to cope not merely with the smugglers themselves but also with their protecting Consulates. Here, however, his nationality has enabled him to dare much that no mere native official of any rank could have attempted. He has established a patrol

[1] It is due to Mr. Vivian to say that he has also vigorously supported Mr. Scrivenour in his difficult work, and has not, like too many of his colleagues, persisted in upholding indefensible abuses.

service along the coast, which, in concert with a couple of cruisers at sea, has immensely increased the difficulties of the illicit trade, and disregarding the letter of Capitulation law—as abusively misread in Egypt—he has on several occasions searched both fishing and shore boats suspected of having contraband on board. Notwithstanding the recent stagnation of trade, the result of these and other reforms [1] has already been to greatly increase the revenue of the department, with the certainty of still further augmentation as they are extended. Under the old system, it was estimated that not more than 3 of the 8 per cent. receivable on imports reached the Treasury: this has already grown to 5 per cent., and there is every reason to hope that before the present year is out nearly the whole will be honestly encashed.

But, while complete reform of the Customs service is thus impeded by anachronistic treaty difficulties, the Post Office, which is not so trammelled—its liberty of action being now recognised by the Convention of Berne, of which Egypt is one of the signatory Governments—has made rapid strides towards a European standard of organisation and efficiency. This, which is one of the youngest branches of the Egyptian administration, was worked as a private enterprise up to 1865, when it was purchased by the Government, with its direction, however, being continued in the hands of its old manager,

[1] Travellers arriving at or leaving Alexandria will gratefully appreciate the minor reforms that have been effected in the landing and clearance of baggage. The rabble of Arab examiners who formerly passed anything for *backsheesh*, or if it was refused turned the contents of trunks inside out in a dirty open yard and left their owners to re-pack them as best they could, has been replaced by a well-disciplined staff, mostly of Europeans, who receive no fee of any kind, and conduct the examination in a comfortable waiting-room, as civilly as our own Customs officers at Dover or Charing Cross.

Signor Muzzi, an Italian, subsequently promoted to the rank of Bey. Considerable improvements were introduced into the service in respect of safety and rapidity of communication, but financially it showed regular annual deficits, in the face of a steady increase in the number of letters and "groups" carried.[1] As part, therefore, of his new scheme of general administrative reform, the Khedive last year replaced Muzzi Bey by Mr. Caillard, an officer of great special ability and long experience in St. Martin's-le-Grand, and, as in the case of Mr. Scrivenour at the Custom-house, gave him plenary powers to re-organise the service as he thought fit. Like his colleague in the Customs, the new director struck at the root of most of the old abuses, by dismissing nearly one-fourth of the whole *personnel* and replacing many of the remainder, while reducing also most of the other working expenses by nearly 50 per cent. In Europe such sweeping surgery would have seriously crippled the department, but here it had the opposite effect. It had been the old Eastern story of many being employed to do badly the proper work of a few at the cost of nominally low pay, but of grave frauds on both the Government and the public. The result has already been a very positive improvement in the working of the service, and the conversion of the old deficit into a considerable surplus. The staff of the department, which now comprises in all about 380 persons, exclusive of 342 camel-drivers and couriers, for the desert service is still a very motley one, consisting chiefly of Italians, native Egyptians, and

[1] Sealed parcels of money in bulk, which were the only means of remittance to or from the interior till the recent opening of money-order offices for comparatively small sums. Large amounts, for the purchase of produce, and other commercial purposes, are still sent in the old way, the declared value of each group being stated in the postal invoice, on the presentation of which by the payee the parcel is delivered intact.

Syrians, with a sprinkling of French, Greeks, Austrians, and Russians. The new director-general is endeavouring as far as possible to replace these foreign elements by natives; but as yet his experience is that neither Arab, Copt, nor Turk, though in many instances possessed of great intellectual suppleness, can be safely trusted with positions of independent responsibility. Associated with Mr. Caillard, as his lieutenant, is another ex-official of our English Post Office, who has very efficiently helped in carrying out the reforms thus far effected. The department has agencies (post offices) in 67 towns and villages, 34 of which are in Lower and Middle Egypt, 6 in Upper Egypt, 15 in the Soudan, and 5 on the coasts of the Red Sea, besides 7 offices out of Egyptian territory in the Levant, to and from which it sends and receives mails by the Khedivieh steamers. At present there is at least one delivery daily between Alexandria and Cairo and all the principal towns and villages of Lower Egypt; while the chief places on the main line of railway receive and despatch three, four, or in some cases even five mails a day; the delivery of which is now hastened by the establishment of post-office vans attached to almost every train. A house-to-house delivery, even in Alexandria or Cairo, is as yet impracticable owing to the irregular manner in which nearly all the older streets are built, and the absence of numbers on the houses in all but the new quarters. The delivery is consequently effected from the windows (*guichets*) of the Post Office, the correspondence being alphabetically sorted into pigeon-holes before being given out. The principal mercantile firms avail themselves of the private box system, which, on payment of a small annual fee, secures to them an earlier delivery and other facilities. Private boxes of this kind are now established in all the

principal towns. The correspondence with the interior is chiefly commercial; what may be called "family letters" forming only a very inconsiderable part of the total number delivered—about 2,250,000 a year. For this reason the proportion of letters exchanged between the native population is very small as compared with that of any European country, and nothing like the postal development which is in steady progress in Europe can therefore be looked for in Egypt for many years to come. Here, however, as elsewhere, the spread of education will have its usual effect, and with increased facilities of communication private (family) correspondence will also increase. The rates of postage are of course high relatively to those of Europe, though still lower than the old charges in the United Kingdom before the great reform of Rowland Hill. At present no increase of correspondence could be expected from a reduction in the rate, which would therefore be a mere sacrifice of revenue without compensation to any interest. The heaviest part of the work of the service occurs during the winter months, when the grain, cotton, sugar, and other trades are at their height. During this season large sums of money are sent through the Post Office, chiefly from Alexandria, but also from Cairo, to the villages, in payment of produce bought for exportation. The aggregate amount thus remitted during an average season may be estimated at 10,000,000*l.*, the annual total being about 15,000,000*l.* As the cash thus sent into the villages at any given time is out of all proportion to that received from them, the money-order system is not adapted to this branch of the department's business, and many remittances are consequently still made in the old form of "groups," the insurance and transport charges on which, though moderate,

form a large part of the postal revenue. It says much for the efficiency with which the service is controlled, that of the large amount thus annually transmitted—no inconsiderable part of which goes to the remote provinces of the Soudan, only an infinitesimal proportion fails to reach its consignees. The development of the international part of the service is hampered by the existence of the half-dozen or more foreign post-offices which are still maintained, in pursuance of the old Capitulations practice, at Alexandria, Suez, and Port Saïd. Since the Berne Postal Union treaty came into operation, these foreign offices have wholly lost their *raison d'être;* and organised as the native service now is, they are sources rather of delay and confusion than of convenience, even to their respective national colonies. Their withdrawal is therefore as much desired by Europeans as by the native authorities, by whom they are not unreasonably regarded as offensive relics of a political situation that no longer exists.

For the purposes of provincial administration Egypt is divided into three great sections, called *El-Bahari*, *El-Vostani*, and *El-Saïd*—Lower, Middle, and Upper Egypt—which, besides the eight *mohafzas*, or special city governorships already noticed, are further divided into the following fourteen *mudiriehs* or Prefectures: —(1) In Lower Egypt—Behéra, Gizeh, Galioubieh, Charkieh, Menoufieh, Garbieh, and Dahkalieh; (2) in Middle Egypt—Benisouef, the Fayoum, and Minieh; and (3) in Upper Egypt—Assiout, Girgheh, Kenneh-Cosseir, and Esneh.[1] These prefectures are sub-divided into departments, and these again into communes or

[1] Although Egypt proper is generally said to end at Assouan, the jurisdiction of the mudir of this province of Esneh extends to Wady-Halfa, 210 miles higher up into Nubia.

cantons, each of which includes several villages. The respective heads of these divisions are called mudirs (whose rank is commonly that of a *moutamaïs*, or lowest class civil Pasha), mâmours, nazirs, and sheikhs-el-beled. Formerly the whole of the first class belonged to the old Turkish aristocracy, but they are now nearly all Arabs, as are also a majority of the three inferior grades; the exceptions being mostly Christians, to whose official employment their religion is in Egypt no bar, with a few Egyptian-born Turks as mâmours and nazirs. The sheikh-el-beled, or village headman, though virtually elected by his fellows, is formally appointed by the Government, to which he is personally accountable for the village taxes—in the collection of which he assists the saraffs or tax-gatherers—and for such *corvée* demands as may be made upon it. He is, in fact, the village magistrate and constable in one, whose authority comes most home to the experience of the Fellah, who may, but seldom does, appeal against his decisions to the communal council; so that as he apportions a tax, regulates the distribution of water from the neighbouring canals (his own land generally faring best in this respect), or selects men for forced labour or the conscription, his fiat as a rule is uncomplainingly obeyed. He is, however, personally responsible for the shortcomings of his *administrés*, and not seldom pays on the soles of his feet for their fiscal or other default. His immediate superior, the nazir, acts as inspector of the group of villages within his commune, and reports to the mâmour of his department, who, till the recent reform appointing a Controller-General of Receipts, received the taxes from the saraffs, still ensures the repairs of the canals, sees that the men requisitioned by the Government are duly supplied, and was answerable for the whole

to the mudir. Associated with these various functionaries are (1) five "Councils of Agriculture"—two in Lower and three in Middle and Upper Egypt—and (2) an "Administrative Council" for each canton of the fourteen provinces. The first consist each of a president and superintending engineer named by the Government, and of as many members as there are cantons in the province, chosen from among the village notables by the communal councils. Their function is to examine all plans submitted for the repair of existing public works or the execution of new ones, and, if approved, to assess on the various districts their shares in the necessary money and labour cost; and also to supervise and promote the improvement of agriculture within the area of their respective jurisdictions. The inferior communal councils are elected by the villagers from amongst themselves, chiefly to carry out in detail the measures decided on by the councils of agriculture, and to check abuses by the sheikhs-el-beled. Native tribunals administered by cadis or their naïbs, a sufficient but not numerous force of police, and an ample staff of subordinate engineers, who personally direct the making or repairs of public works—complete the machinery of an administration which, nothwithstanding much uninformed assertion to the contrary, is on the whole merciful and liberal. Great oppression was no doubt practised by the late Minister of Finance, not merely in the collection of the legitimate taxes, but in the exaction of large extra payments that never reached the Treasury. But under the reformed *régime* now in operation this is no longer possible, and the danger is rather the other way—that the historical perversity of the Fellah will defeat all mild methods of tax-gathering, and the revenue suffer accordingly. For as it was under the Pharaohs, so is it still:

the Egyptian ryot will swear by all the gods that he has not a piastre, and will gladly bear any amount of stick or *courbash* if only he can, in whole or in part, evade payment of the most equitable tax. Ismaïl Sadyk knew the limit of his endurance before disgorging, and by exceeding it when necessary got his revenue, and more. It may be doubted if the humaner arguments of Prince Hussein and Mr. Romaine will prove equally effective up to even the fair budget point. The *corvée* tax for other than the communal public works is still a grievance, but already before the fall of the Moufettish, whose vast estates were chiefly tilled by this kind of labour, it had been greatly reduced; and even on the Daïra sugar and cotton farms the fellahs employed, though mostly collected by forced levies, are all now rationed and paid. It may be true that the individual labourer is cheated out of most of his wage, but the fault is that of his sheikh and the petty functionaries above him, not generally of the Daïra nazir.

In 1866 the Khedive revived the defunct *Mejlis-Shora-el-Nush*, or Assembly of Delegates, one of the inchoate reforms projected by Mehemet Ali, but which had not met since his death. This germ of an Egyptian Parliament consists of village sheikhs and other provincial notables, elected by the communes, and assembles once a year to receive from the Privy Council a report on the administration during the twelvemonth. Its function is also to consider and advise on all proposed fiscal changes, new public works, and other matters of national concern that may be laid before it. It has, of course, no legislative power, but in practice its recommendations are received not merely with respect, but are often acted on by the Government. Thus, when it was a question last year of rescinding the law of the Mouka-

bala, a special meeting of this body was convoked to advise the Privy Council on the subject, and on its vote being nearly unanimous against the repeal of the law, it was maintained, and is still in operation.[1]

Of the character of the native Egyptian official, high or low, but little need be said. With some notable exceptions, chiefly among the higher functionaries who have received a European education, it possesses in full share most of the usual Eastern defects—of apathy, dishonesty, disregard of truth, and general disposition to do as little work as possible for the largest possible sum of peculative gain. Nor in respect of these qualities is there much to choose between Arab, Turk, or Copt; if there be a difference at all, it is in favour of the Moslem rather than of the Christian, who lacks the pride that often preserves the Islamite from a mean or dishonest act. As a whole, however, the officialism of Cairo compares favourably with that of Stamboul. In the former, the effect of the vigorous intelligence and direct personal rule of the sovereign is wholesomely felt through every branch of the administration, minimising abuses which are rampant at the Porte, where, from the Vizier of the day down to the lowest *kiatib*, personal aggrandisement is the first,

[1] An anecdote which is still told in Cairo about the first meeting of this Arab Diet may be worth recording. When the newly-chosen delegates came together, the Minister of the Interior attempted to give them some rough notions of Parliamentary duty and organisation, and explained that they would be expected to frankly approve or disapprove the measures that should be laid before them. With that view, he invited such of them as were disposed to criticise the Government programme to range themselves on one side of the chamber, while those who were prepared to give it their full confidence in advance would sit opposite. "God forbid," was the general answer, "that any of them should think of questioning anything the Effendina (the Khedive) proposed;" and so the whole crowded to the Ministerial side, leaving the "Opposition" represented by empty benches. Since then, however, they have grown to be more independent, and now form a useful factor in Egyptian home politics.

if not the only, rule of duty and action to the whole. There are, no doubt, black sheep within cannon-shot of Abdeen; but since the fall of the late Moufettish their wool has assumed a distinctly lighter hue. In the provinces this salutary personal influence of the Khedive is of course less felt, and the mudir of Esneh, Wady-Halfa, or Dongola, may with impunity commit abuses that are never heard of near Cairo, and which, unless reported by some incontinent traveller, are not likely to ever reach the ear of the all-feared Effendina,[1] who, when they do, seldom tempers justice with mercy to such offenders. As provincial misrule, however, chiefly consists in extorting extra taxes that never reach the Treasury, or unpaid labour for private farms owned by the mudir or his friends, the authority of the new Controller-General, exercised directly through his own agents, will largely operate to protect the fellah from both these forms of oppression; and, if so, his lot will be easier than that of Egyptian ryot ever was before.

Such is the present machinery of Egyptian administration; but, regularly organised as the whole may be, its parts form only so many wires all pulled by the governing hand of the Khedive, who, from behind his little gilded table, rules council, ministers, and mudirs, as a colonel rules his regiment. The only checks on his otherwise absolute power are the foreign revenue controllers, and the international tribunals; the first of which operates most wholesomely as preventives of financial abuse, while the latter—though as yet incompletely—exert a still more salutary restraint, such as Egyptian sovereign never before acknowledged. It is due to his Highness to remember that these limita-

[1] "Great Lord," the native designation of his Highness.

tions of his prerogative are self-imposed, and the loyalty with which he has thus far respected both is full of good augury for further and larger reforms. In the meantime, whatever may still be its defects, this Government of Egypt stands out as the only one between the Danube and the Indus which has broken with the fanatical conservatism of Islam, and placed itself in frank *rapport* with Western civilisation. That it is so entirely personal is, of course, an element of weakness; but, apart from the fact that the heir-apparent is a Prince of liberal education, and of already approved administrative ability, a governing *staff* has been created, in whose hands the traditions of the present reign may be safely trusted to lose none of their force. The change in the succession put an end to the scramble for selfish aggrandisement during a single viceroyalty, and substituted a dynastic interest in the welfare of the country, which is, perhaps, its best guarantee for good government in the future.

CHAPTER VI.

FINANCES.

Revenue and Expenditure Forty Years ago—Situation at Commencement of the Present Reign—Present Main Elements of Egyptian Finance—What the Revenue now consists of—The Expenditure—Explanation of its Increase—History of the State Debt—The Crisis of Last Year—Mr. Cave's Mission, and his Report—The French Unification Scheme—Its Failure—The Göschen-Joubert Scheme—Its Merits and Defects—Its Acceptance by the Khedive—The New Financial Administration—Its Guarantees—The Essential Solvency of the Country.

THE finances of Egypt have followed the same law of growth which has ruled in nearly every economical feature of the country during the past forty years. In 1835, the revenue was estimated at 2,600,000*l.*, and the expenditure at about 2,300,000*l.*, without any public debt whatever. In 1862, the last year of Saïd Pasha's reign, the figures had risen respectively to 4,929,000*l.* and 4,330,000*l.*, with a debt of 3,292,300*l.*; while last year's Budget claimed an income of 10,772,611*l.*, against an outlay (exclusive of interest on the floating debt) of 8,981,852*l.*, with a total State debt since fixed by the Göschen-Joubert scheme at 76,000,000*l.* Of these large aggregates, the first is sufficiently explained by the development in the trade and productive industries of the country, the second mainly by the cost of an improved administration and the charges on the national debt, and the gross total of this last itself in great part by a heavy outlay on public works which within the past sixteen years has, in this respect, placed Egypt on a level with most second-rate European States, but

largely also by a vicious system of financing which has burthened the country with a mass of debt beyond its fair capacity to bear.

It will be convenient to consider these three main elements of Egyptian finance in separate detail.

I. The *Revenue* may be grouped under the five heads of (1) Direct and (2) Indirect Taxes, (3) the Moukabala and Village Annuities, (4) Railway Profits, and (5) Miscellaneous Receipts.

Of these the first include (*a*) the land taxes, (*b*) the tax on date-trees, and (*c*) trade licenses. As regards the first of these, the latest official report states the total area of land under cultivation at 4,805,107 feddans (acres), of which 3,580,239 pay a rent-charge (*miri*) averaging about 22*s.* per feddan, and the remaining 1,224,868—held under the privileged tenure explained elsewhere—only a tithe or quit-rent (*oushur*) of about 7*s.* per feddan all round.[1] The revenue from both these taxes last year amounted roundly to 4,305,000*l.*, and may be fairly expected to reach 4,500,000*l.* within the next four or five years, when new land already reclaimed falls under taxation.[2] While the

[1] This total acreage of tax-paying land is an increase of 743,121 feddans over the area in Saïd Pasha's time; in addition to which 352,350 feddans (*oushury*) have also recently been brought under cultivation, and will shortly be assessed for taxation, as will also a further 267,000 feddans which have not yet been included in the cadastre. This total of nearly 1,363,000 feddans amounts to 33½ per cent. of the whole cultivated land of the country fourteen years ago. There are, besides, 1,097,999 feddans of land registered during the reign of Mehemet Ali, but still uncultivated, and about 1,500,000 feddans not yet registered, in the provinces of Garbieh, Sharkieh, Bèhéra, and Dakálieh, most of which may be similarly reclaimed.

[2] Up to the time of Saïd Pasha, the vicious Turkish system was followed of collecting the land-tax in kind; but amongst his other reforms that Prince substituted payment of the tax in money, allowing the cultivators to sell their produce in the market direct to the European traders,

heavier of these taxes, too, may be regarded as moderate in a country in which the gross yield of cultivated land ranges from 8*l.* to 12*l.*, or even 15*l.* an acre, the fact that one-fourth of the whole pays only the minor charge shows how large a taxable reserve the Government possesses in this main source of its revenue. On the other hand, as most of these privileged estates belong to members of the Viceregal family or other influential persons, there is not much present likelihood of their being brought under the higher assessment. The tax on date-trees—at the average rate of 10*d.* each on 4,467,000 trees—represents a receipt of about 189,000*l.*, being an increase of 3,000*l.* on the previous year's Budget. This particular impost, however, admits of but little extension, and the margin for further productiveness is less than this difference would seem to suggest. It is even probable that any re-adjustment of taxation may rather reduce than augment the sum received from this source, as the tax is in reality a second impost levied from land which already pays either *miri* or *oushur*. Trade Licenses, on the other hand, which last year yielded 422,000*l.* against 286,500*l.* in 1874, may be safely reckoned on for an increase, not probably at this high ratio, but in fair proportion to the growth in the trades and skilled industries of the country, on which this tax of less than 1*l.* 8*s.* per head of those engaged in these avocations is the only direct impost levied.

The Indirect Taxes comprise the Customs and Tobacco duties; octrois and various other tolls falling

instead of, as formerly, to the Government at its own price. As a rule, therefore, both the *miri* and the *oushur* are now collected twice a year in money; but, by mutual arrangement with the saraffs, payment is sometimes made in kind at the current market rate.

under the head rather of miscellaneous local, than of general taxation. The Customs, although hitherto very badly managed, last year produced 639,000*l.* from an *ad valorem* tariff of nominally 8 per cent. on imports, and 1 per cent. on exports, fixed by the existing commercial treaties with the Porte, an early modification of the tariffs of which is probable under the new powers of the Khedive. As it is, the revenue of the department during the past fifteen years has supplied a fair gauge of the contemporary prosperity of the country. Thus, while in 1861 the total value of exports and imports (including goods in transit) on which duty was paid—there is no accessible record of the actual receipts—was only 6,445,445*l.*, in 1863, when the cotton famine had abnormally stimulated the growth and export of that staple, the Customs revenue of the year rose to nearly 1,240,000*l.*, and in the reaction that ensued fell in 1867 to 482,780*l.* A stationary period followed from the latter year to 1871, since which, without any exceptional activity, and notwithstanding the diversion of almost the whole Indian traffic to the Suez Canal, a nearly regular annual improvement has taken place. A measure of the extent to which bad administration has hitherto checked this is suggested by the fact that, while the receipts of the Alexandrian Custom-house for 1872 should, according to an authoritative calculation, have amounted to 558,787*l.*, those from the whole of the ports reached only 541,215*l.*, or 17,510*l.* less than what ought to have been the year's revenue from Alexandria alone.[1] Under the new European management, the abuses which explain this anomaly will doubtless diminish, if they do not altogether cease, and the department may be regarded as one of the most ex-

[1] Mr. Cave's "Report," p. 4.

pansive sources of Egyptian revenue, irrespective of the probable increase of the present low rate of 1 per cent. on exports when the existing treaty expires. Similarly, as regards the tobacco duty, which, when fixed five or six years ago, was reckoned to produce 500,000*l.* a year, but has as yet not exceeded 264,000*l.* The deficit on this item has no doubt been largely caused by smuggling, for the estimate itself is a moderate one for an almost universally smoking population of nearly 5,500,000, and may be fairly expected to be approached, if not fully realised, under a more efficient system of customs and excise control. The tax on which it is based is only 20 piastres per oke, or about 1*s.* 6*d.* per lb.—less than half our English duty—and as the yearly importation, over and above what is used of native growth, exceeded 2,800,000 okes (=7,700,000 lbs.), a revenue of 500,000*l.* would still leave a margin of more than 10 per cent. for reduced consumption or other causes. For the present, however, the proceeds of this tax fall slightly below 264,000*l.* a year.

The Moukabala and Village Annuities are not properly taxation at all, but terminable receipts involving, eight years hence, a large permanent reduction of revenue. The former—which means "compensation"—is the name given to a measure introduced in 1871 to redeem half the land-tax, with a view to paying off the then floating debt with the proceeds, without having recourse to a foreign loan. At that time the great majority of Egyptian landowners had no legally regular title-deeds to their property, and in consideration of their consenting to pay six years' land tax in advance—either in one payment or in six yearly instalments—the Government proposed to give them indefeasible titles, and to reduce this tax by one-half for all time. The measure was,

however, found to be impracticable. Only the wealthier proprietors could afford to comply with its terms in either alternative, and after about 8,000,000*l.* of the estimated total of 27,825,000*l.* had been encashed, it was found necessary to commute the proposed six instalments into twelve annual payments of about 1,530,000*l.* —reckoning a discount of 8½ per cent. to be allowed on each instalment—after the last of which, payable in 1885, half the tax, whether *miri* or *oushur*, will be for ever redeemed. This modification of the measure of course defeated its original object, and saddled the Government with an engagement which, however advantageous to the landowners who could afford to bear the immediate burden, was fiscally ruinous to the Treasury; seeing that for a sum of in all less than 27,000,000*l.* spread over a dozen years, it thence afterwards surrendered for all time nearly 2,500,000*l.* a year of its surest and most easily collected revenue. The money, however, was urgently needed, and the measure was therefore upheld till May of last year, when, the difficulties of the floating debt having culminated, the Government—yielding to the pressure and evil counsels of the influential group of French financiers by whom the large mass of its Treasury bonds was chiefly held—decided on unifying the whole of its debt, funded and floating, on terms which, amongst others, provided for its redemption in sixty-five years. To enable it to bear the heavy interest-charge which this arrangement entailed, it was resolved not to reduce the land-tax, and by the decree of May 7th the Moukabala was abolished, the Government being left to make what compromise it could, if any, with the proprietors who had already paid under it up to that date. But the scheme of which this was a feature having failed to meet with acceptance in

England, fell through, and on reconsideration the Government, after consulting the Assembly of Delegates, decided on maintaining the Moukabala, and keeping faith with the contributory landholders. Accordingly, when the substituted project of Messrs. Göschen and Joubert was negotiated six months later, the Moukabala formed part of it, and is now again in revived operation, with this modification, that the discount or bonus of 8⅓ per cent. by whose operation the half-tax was to be redeemed within the twelve years is now withdrawn, and the whole of the reduction will come into force at once in 1886. The effect of this will be to augment the receipts from the measure by about 135,000*l.* a year—at the expense, of course, of those who previously received that amount in rebate. But even with this increment the present advantages derived from the item must be regarded as dearly bought at the cost of the sacrifice it will entail eight years hence. This will no doubt be in great measure recouped by the taxation of new land and the general expansion of revenue in the meantime; but that improvement would have accrued in any case, and the necessity for a measure which thus so largely discounts the future is, therefore, none the less to be regretted. The Village Annuities only resemble the Moukabala in being similarly terminable. These date from 1870 when, in consequence of the sudden reduction in the price of cotton which followed the temporary rise caused by the American civil war, the growers were unable to repay the large advances made to them by the merchants and money-lenders during the inflation of the market. The Government came to their relief, and, taking on itself the collective debt of about 1,000,000*l.*, issued in payment of it interest-bearing "Village Bonds" spread over seven years. This term was subsequently

extended to twelve years, and the annuities will therefore expire in 1885, up till which time the Treasury is being repaid by the original debtors at the rate of 160,000*l.* a year. The termination of both these items will, consequently, involve an annual reduction in the revenue of about 1,820,000*l.* after 1885.

Profits on Railways, the next important item, may be credited with similar elasticity to that experienced in the Customs, arising from a steady increase in the traffic, gradual improvement in the administration, and the continuing extension of this class of public works. All three of these causes combine to explain the growth of revenue from this source from 361,300*l.* in 1863, the first year of the present reign, to 990,200*l.*, the net amount received from it by the Treasury last year. The cheapness with which the lines are worked no doubt also contributed to this result—the cost of working being only about 46 per cent. of the receipts, or, if telegraph revenue and other "rents" received by the department be included, about 41 per cent., as compared with 53 per cent. spent on most European lines. This low proportion of working cost to revenue arises mainly from the moderate rate of speed at which trains are driven, and from the employment chiefly of native labour. Taking the aggregate of the lines now open at 1,100 miles—a mileage which, in proportion to population, is greater than that of either Austria, Hungary, or Spain—and estimating their cost at the locally high average of 11,000*l.* a mile, these net profits of last year represent a dividend of nearly 8 per cent. on the capital spent on the system, irrespective of its indirect effect on other branches of revenue by promoting commercial activity and the general prosperity of the country. That still better results will be realised under the new

European administration of the lines may be confidently expected; and although the property in them is still retained by the Government, the "privileged" stock to which their revenue is now specially hypothecated, may, for all practical purposes, be regarded as high-class railway debentures.

The remaining aggregate of receipts, grouped under the head of "Miscellaneous," and amounting in the total last year to about 2,100,000*l.*, is made up of 519,000*l.* received as octroi and other municipal dues in Cairo and Alexandria; of 202,000*l.* collected as indirect taxes by the provincial prefectures; of 306,000*l.* derived from the salt monopoly; of 467,000*l.* of special crown rents and duties payable to the Ministry of Finance; of 245,000*l.* from the Post Office, salt-fish farming, lock, canal, bridge, and harbour tolls and dues (other than those of Alexandria); of 143,000*l.* net revenue from the Soudan; and about 220,000*l.* of arrear taxes.

This last item being deducted, the revenue for the year was roundly about 10,500,000*l.*, of which rather less than 7,000,000*l.* was the proceeds of actual taxation, the remainder representing the redemption of future taxes, the payment of old ones, railway receipts, canal, bridge, and other dues, which were not in fact taxes in the ordinary sense, but payment for equivalents received. The whole positive taxation of the year, therefore, was about 25*s.* per head of the population, an amount which, although not oppressive, is still relatively high for a country in which the great majority of the people are much poorer than the corresponding classes in Europe. Indeed, the strain in this direction has reached a point beyond which, for some years, at least, to come it cannot be safely carried, and the further growth of the

Egyptian revenue must, therefore, depend rather on the reclamation of new land to cultivation and the general expansion of trade than on any possible increase in the present fiscal burdens of the country. It may be doubted, indeed, whether under the humane and more equitable system of assessment and collection which has been recently introduced, last year's aggregate of receipts will be even maintained. The taxation of foreigners, who still most inequitably enjoy their old fiscal exemption under the Capitulations, might fairly be made to yield 200,000*l.* a year, but of this there is no present likelihood, and from further taxation in any direction there is therefore nothing to be reasonably hoped.

II. Passing from revenue to *Expenditure*, the latter, we find, has grown rather more than *pari passu* with the former—an unsatisfactory feature, which is however explained by the great outlay on public works and the yearly increasing charges of the public debt. But this side of the account is now simplified, and its figures for the future controlled by the recent arrangement which assigns a fixed sum for administration, and allots the balance of the revenue, be it much or little, for the service of the debt. Previously there was no check upon the former, and where the outlay on it and the annuities on the debt exceeded the year's income, the deficit was met by the vicious expedient of fresh borrowing at usurious rates of interest, till borrowing became no longer possible, and the inevitable crisis of last year ensued. To this mischievous license the decree of November last put an end, and so long as it remains in force the spending powers of the Government are limited —for the present and next year to 4,259,350*l.* and 4,403,961*l.* respectively, and thence afterwards, till 1886, to 4,500,000*l.* a year. Although, therefore, the

Estimates on this side of recent Budgets have now little more than an historical interest, their chief items—which, more or less modified, are still those of the current expenditure—may be mentioned. First comes 685,308*l.* for tribute to the Porte. Up till 1866 this item was only 376,000*l.*, but in that year, in consideration of the firman which changed the order of succession, the payment was increased to 670,308*l.*, to which 15,000*l.* a year has since been added for the cession of Zeyla. The Civil List of the Khedive (300,000*l.*), raised by grants to the heir apparent, his Highness's other sons, and the numerous families of the preceding Viceroys to 560,000*l.* —including 60,000*l.* a year to Prince Halim Pasha—cannot be considered excessive. But nearly 880,000*l.* for the Ministries of War and Marine might be more easily reduced, without injury or peril to any interest of the country; for, politically conditioned as Egypt now is, with absolutely nothing to fear from within or without, a standing army of 30,000 men and a navy to match, are clearly in excess of its military wants.[1] The reduction of the estimate for public works from 1,041,000*l.* in 1874, and 512,500*l.* in 1875 to 205,000*l.* for last year, shows how purely optional had been the previous outlay in this direction; and but that the contracts for the Soudan Railway, to which nearly the whole of this last sum is allocated, have been taken, even that amount might have been kept out of the year's Budget. As it is, barring this inevitable item, fresh expenditure on this class of works has been wholly suspended, and for some years to come is

[1] Since this was written, several regiments have been virtually disbanded, nearly their whole rank and file having been sent home to their villages on unlimited furlough, and only the regimental cadres retained. [Later still, these have been recalled to service, to make up the contingent requisitioned by the Porte.]

not likely to be resumed on the old scale. The considerable item of 200,000*l.* for the expenditure of the Rouznameh on yearly gifts to Mecca, the cost of the annual caravan, and other charitable outlay, will not readily bear reduction in a country on three-fourths of whose population the fervid national faith has still a powerful hold. But for the recent large addition of foreigners at high salaries to the staff of the chief Ministries, sensible economies might have been effected in the cost of nearly the whole by reducing the number of inferior native employés, who swarm superabundantly both in Cairo and throughout the provincial administrations. As it is, the most that can be hoped for is that the economic winnowing of the one class will balance the new additional expense of the other. The Ministers themselves and the higher native functionaries are not extravagantly over-salaried, as in Turkey; and in their case little or no reduction can be fairly made. The interest (198,829*l.*) on the Suez Canal shares, sold to the British Government, is of course a settled item till the bonds rank for dividend, in 1894, and was accordingly provided for in the increased administrative Budget fixed by the decree of November last. But one chapter of expense that weighed heavily on this side of the national account is now, it may be hoped, closed. Henceforth the Khedive may quite safely refuse payment of the blackmail to Constantinople, which, though officially unconfessed to, in some years notoriously exceeded the nominal tribute. It will be his own fault if he submits any longer to extortions which have now no more excuse in policy than in treaty right. This administrative first charge on the revenue may, therefore, be regarded as ample for all its purposes; and, except in the extreme event of another cattle murrain, a destructive Nile, or

some similar *force majeure* necessitating extraordinary outlay, there is no reason to apprehend either need or disposition on the part of the Government to exceed the limit thus wholesomely imposed.

III. The *Debt* of Egypt has outstripped in rapidity of growth the large totals of revenue and expenditure just noticed. As settled by the decree of November last, it now roundly amounts to 80,393,000*l.*, and yet the first borrowing dates only from 1862,[1] when the commitments of Saïd Pasha to the Suez Canal Company, and the pressure of—for those halcyon days—a heavy home debt, compelled him to imitate the example of the Porte and appeal to the European money markets for a loan of 3,292,800*l.* A simple statement of the terms on which this and the subsequent loans were effected will go far to explain the recent financial straits of the Egyptian Government. No particulars have been published of the rate at which this first operation of 1862—a 7 per cent. stock, with a sinking fund of 1 per cent.—was taken by the contractors, Messrs. Frühling and Göschen; but, as it was placed in two separate issues of 82½ and 84½ per 100, it may be assumed that commission and other charges reduced the actual sum realised by the Treasury to a mean of not more than 80, or a net total of, roundly, 2,500,000*l.*, instead of 2,744,000*l.*, the amount paid by the public.

Be this as it may, the proceeds of the operation met less than half the wants of the Government; and, on the death of Saïd Pasha, in January 1863, his successor found clamouring for liquidation a balance which there was no hope of discharging out of revenue. A second

[1] Two small temporary loans had been previously contracted with Paris bankers, the first in August 1860, for 28,000,000 frs., and the second in March 1862, for 40,000,000 frs., but neither was quoted on the Bourse.

loan was thus necessitated, and this—for 5,704,200*l.*, with 7 per cent. interest and 3·87 per cent. sinking-fund—was successfully issued by the same contractors towards the close of 1864, at 93 per 100, but, with commission and other deductions, only realised net 4,864,063*l.* to the Government. It was hoped that the proceeds of this operation would clear off the balance of debt bequeathed by Saïd Pasha, and leave a considerable surplus for the public works which the new Viceroy had undertaken soon after his accession. But the expectation was falsified by the cattle murrain that broke out shortly afterwards and for nearly two years ravaged the whole country from the Delta to Nubia. This epidemic cost the country nearly 5,000,000*l.*—in loss of revenue, in importing cattle to replace those swept away, in supplying agricultural machinery, and in distributing corn and other relief to the Fellaheen who had suffered most from its effects. The Alexandria and Suez railway—the only one then existing in the country—had been left by the late Viceroy in a state of complete dilapidation, and to repair it, and renew the rolling stock, a special debenture loan for 3,000,000*l.* was effected in 1866—again through Messrs. Frühling and Göschen—on the security of the railway itself. This, which was also a 7 per cent. stock, redeemable in eight years,[1] was issued to the public at 92 per 100, but realised to the Government only 2,640,000*l.*, on which the actual charges, therefore, became 8 per cent. for interest and 18·9 per cent. for sinking fund, or an annuity in all of 26·9 per cent. In the meantime, the abolition of forced labour on the Suez Canal,

[1] This loan was actually repaid in six annual instalments of 500,000*l.* each, beginning on the 1st January 1869, a rate equivalent, as above stated, to a sinking fund of 18·9 per cent.

and the modification, in other important respects, of the Saïd Pasha's contract with the Company had raised a crop of differences between the latter and the Government. The Viceroy having been induced to refer these to the arbitration of the Emperor Napoleon, his Majesty awarded to the Company the enormous indemnity of 3,360,000*l.*, in 12 per cent. Treasury bonds, to which was subsequently added, in 1866, a further cash payment of 400,000*l.* for the re-purchase of the Wady domain, which the Company had bought some years before from Saïd Pasha for 74,000*l.* To meet the mass of floating debt thus created, and at the same time to provide in part for the public works already begun or contemplated, the large 11,890,000*l.* loan of 1868 was next contracted, though Messrs. Oppenheim and Co., in concert with the Imperial Ottoman Bank and the Société Générale of Paris. This, although like Saïd Pasha's loan of 1862, a 7 per cent. stock, redeemable in thirty years, was issued at the low price of 75 per 100, and contractors' commission and charges—which grew heavier with each new operation—being again deducted, produced to the Treasury only 7,193,334*l.*, at a total annual cost of 13¼ per cent. Nevertheless, with the amount realised, nearly the whole of the floating debt was paid off, and for a considerable time discount in Egypt fell to the unprecedentedly low average of from 6 to 8 per cent. But the continuing heavy outlay on harbours, railways, telegraphs, canals, and other great works, which were being carried out in a scale far beyond—not indeed the wants, but the concurrent means of the country, soon again compelled recourse to the issue of new Treasury bonds, to nearly the full extent of the expenditure thus incurred. The revenue had increased largely since the death of Saïd Pasha, owing to the steady

expansion which had taken place in nearly every branch of Egyptian industry and trade; but the reorganisation and re-armament of the army, the construction of new coast defences, the doubling of the tribute to the Porte, and other large though officially unacknowledged payments to Stamboul, had swelled the expenditure in equal ratio, and, after payment of the charges on the foreign debt, left little or nothing for public works. The creation of a new floating debt at a greatly increased rate was the necessary result; till in the spring of 1873, the total of these unfunded liabilities had risen to nearly 26,000,000*l.*, on which the average interest charge was not less than 14 per cent. It was, therefore, resolved to fund the whole of this large amount; and, with this view, a 7 per cent. loan for 32,000,000*l.* (nominal), designed to consolidate the whole, was negotiated with Messrs. Oppenheim and substantially the same group who had co-operated with them in the loan of 1868. Partly owing, however, to the monetary disturbance occasioned by the American panic in the spring of 1873, and partly no doubt to the largeness of the operation the issue of the first half of this loan at 84½ was not a success, and, although this amount had been taken "firm" by the contractors, the Khedive was induced to accept a much lower price, and the large remainder of the stock was obtained on terms which permitted its being gradually placed on the market at an average rate of about 70. This costly operation realised to the Government only 20,740,077*l.*, of which, too, 9,000,000*l.* was paid, not in cash but in long dated bonds of the floating debt, bought up by the contractors at various rates of discount (much it was said as low as 65), and delivered to the Treasury at 93—an operation which, as Mr. Cave pointedly remarks, "materially en-

hanced the profit accruing to the negotiators of the loan."

Thus, out of five loans of a total nominal amount of 55,887,000*l.*, the Egyptian Treasury received only about 35,000,000*l.* in cash or its equivalents at the current market rate; and on this—according to a return furnished by the Minister of Finance—it had already repaid no less than 29,570,994*l.*[1] in interest and sinking-funds up to the end of 1875, when 46,734,500*l.* nominal still remained to be redeemed.

[Besides the national debt proper of Egypt, incurred on these ruinous terms, the Khedive himself had contracted three other foreign loans on the security of his own private domains, the charges on at least two of which became so mixed up with those of the State debt as to contribute materially to the thickening difficulties of the Treasury. It will, however, be more convenient to notice these private borrowings in connection with the subject of the Daïra, on the credit of which they were raised, and the revenues of which have recently been hypothecated for their redemption. To return, therefore, to the State debt.]

As the cash proceeds of the 1873 loan amounted to only about 11,000,000*l.*,[2] it barely relieved the embarrassment it was meant to extinguish, and a mass of floating debt therefore still remained, which the cost of renewals

[1] It seems doubtful from the wording of Mr. Cave's Report, from which this sum is quoted, whether it includes the annuities of the two Daïra loans of 1866 and 1867, which were taken over by the State; but as the total amount of these was only 5,467,000*l.*, of which about 3,500,000*l.* was then still unredeemed, the sum would not much weaken the moral of these figures. According to the contracts, the service of the loans should only have cost 27,923,716*l.* to the end of 1875; but (as Mr. Cave remarks) this sum was probably "swollen by extra charges."

[2] Inaccurately printed in Mr. Cave's Report as 3,000,000*l.*, with 9 per cent. interest.

—many at as much as 30 per cent.—continued heavy outlay on public works, and the cost of the Abyssinian war (set down in Mr. Cave's Report at only 1,000,000*l.*, but in reality believed to be much more), rapidly swelled again to a figure against which the Treasury became increasingly powerless to struggle. Towards the end of 1875 its difficulties had culminated to a point that would have then compelled a suspension of payment but for the sale of the Khedive's shares in the Suez Canal to the British Government, the 3,976,583*l.* received for which temporarily staved off the crisis. With a view to avert this altogether by a radical reorganisation of his financial administration, his Highness requested Her Majesty's Government to send him a couple of experienced Treasury officers to carry out the proposed reform; but, instead of these, the Right Hon. S. Cave, M.P., was commissioned—not to do what the Khedive wanted, but to investigate and report upon the whole details of Egyptian finance. Accompanied by Colonel Stokes, R.E., and three Foreign Office clerks, Mr. Cave proceeded to Cairo in December, 1875, and during the following couple of months siftingly examined the Treasury and Daïra accounts, so as to ascertain as nearly as might be the debts and resources of both. The result was embodied in an elaborate Report which, corroborated as its chief conclusions have since been by other official English and French investigations, may be accepted as an authoritative statement of the main facts of Egyptian finance eighteen months ago.[1]

[1] The sum of Mr. Cave's suggestions was—that for all purposes of an arrangement, the State and Daïra debts, amounting together to 76,746,812*l.*, should be amalgamated, but that the short loans of 1864, 1865, and 1867, should be excluded from this amount, and be paid off by the operation of the Moukabala; the remainder, increased to 75,000,000*l.* by the addition of 3,000,000*l.* for the expense of the Abyssinian war, and the cost of this

But, although this Report demonstrated that both the State Treasury and the Daïra were essentially solvent, and needed only better administration to readily meet all their liabilities, its publication at the time—coupled with the refusal of Her Majesty's Government to lend the Khedive a commissioner to assist in framing and carrying out the suggested reforms—rather damaged than benefited Egyptian credit; with the result that his Highness, unable to renew his maturing Treasury bonds except at absolutely ruinous rates,[1] wisely decided on temporarily suspending payment of the whole till some equitable re-adjustment of the burden could be arranged. The total amount of the floating debt—chiefly in the form of Treasury bonds—had then roundly reached 22,500,000*l.* (reduced by the proceeds of the Suez Canal shares to 18,250,000*l.*), the greater part of which was held by a French group represented by the Anglo-Egyptian Bank, the Crédit Foncier, and Comptoir d'Escompte of Paris. As above-mentioned, a scheme was accordingly framed by the agents of this combination, without reference to the funded bondholders; and under pressure of the strongest official French influence exerted in its support, this was accepted by the

operation to be consolidated into a new 7 per cent. stock, redeemable in 1926. The Report itself, and the more interesting of the tabular statements annexed to it will be found in the Appendix.

Concurrently with this mission of Mr. Cave, Sir George Elliot, M.P., and Mr. Horatio Lloyd framed a project for dealing with the whole subject of both the State and Daïra debts, which competent critics regarded as being on many points preferable to that of Messrs. Goschen and Joubert; but, although the scheme was very favourably received by the Khedive, a difficulty in connection with a proposed small loan which formed one of its conditions led to delay, and precipitated the crisis that so much favoured the subsequent diplomacy of Mr. Goschen and his French colleague.

[1] In April 1876, shortly before the temporary suspension, as much as 3 per cent. a month was paid by the Treasury for the renewal of bonds then falling due.

Khedive and embodied in a decree, dated May 7, which announced the consolidation of all the debts of the State and the Daïra—*with a bonus of 25 per cent. to the holders of the Treasury bonds*—into one unified 7 per cent. stock of 91,000,000*l.*, redeemable in sixty-five years. This extraordinary measure—which was as inequitable to holders of the old loans as its charges were beyond the means of the Egyptian exchequer—was not, it need hardly be said, received with favour in England, where most of the funded debt was held, and the Committee of the Stock Exchange gave expression to the general feeling by announcing its intention to refuse quotation to the proposed new "unified" stock. After vainly struggling against the effects of this announcement, the French scheme virtually collapsed, and its promoters recognised the necessity of conciliating English co-operation in some sounder and fairer project. The Rt. Hon. G. J. Goschen, M.P., whose connection with the earlier Egyptian loans and influential personal position suggested him as an acceptable representative of the English bondholders, was accordingly invited, early in July, to undertake a joint mission, with M. Joubert as agent of the French group, to negotiate with the Khedive some settlement of the difficulty that should be at once practicable and just to all concerned. The suggestion having been approved by the bondholders, Messrs. Goschen and Joubert proceeded to Cairo in the beginning of October, and, after receiving from the Khedive the amplest facilities to repeat the investigations which had been already exhaustively prosecuted by Messrs. Cave, Rivers Wilson, and Villet, they devised a substitute for the French scheme which, if not all that could be desired from the point of view of English interests, was a considerable

improvement on that measure. Accepting both the assimilation of secured and unsecured creditors, and the gross debt of 91,000,000*l.* fixed by the decree of May 7, they reduced this nominally to 59,000,000*l.*—(1) by cutting down from 25 to 10 per cent. the totally inequitable bonus given to the holders of Treasury bonds; (2) by eliminating the whole debts of the Daïra; (3) by detaching the short 1864, 1865, and 1867 loans (as Mr. Cave had proposed) for redemption by the Moukabala; and (4) by converting 17,000,000*l.* into a Preference Stock, secured on the railway revenue and the harbour dues of Alexandria, and of which all State creditors, except holders of the short loans, should receive a *pro ratâ* allotment of about 38 per cent. The 17,000,000*l.* of Preference Stock thus created included 2,000,000*l.* of an advance to the Treasury against the extra hypothecation of the port dues; and, with the balance of 343,977*l.* further left to the Treasury, the net total of 59,000,000*l.* remained for conversion into a unified general debt. To the first of the three categories into which the aggregate of 80,393,000*l.* was thus divided, Messrs. Goschen and Joubert proposed to leave its old 7 per cent. interest, but reduced its rate of redemption from 100 to 80; to the second, in view of the special value of its security, they gave 5 per cent. interest; and for the large third they also retained the old 7 per cent. interest, reduced only by 1 per cent.—to be applied as a special sinking-fund—till the expiration of the Moukabala at the end of 1885. The obvious objection in equity to this manipulation of the various classes of debt was—that while it docked 20 per cent. off the redemption rate of the three short loans, it not merely placed the totally unsecured Treasury bondholders on a level with the funded

creditors, but gave the former a premium of 10 per cent. over the latter for no equitable reason whatever. It was subsequently urged, indeed, that it was necessary to buy off French opposition with this sop; but this can hardly have been so, as the holders of the Treasury bonds were in much worse plight than the secured creditors—with whom, besides, the Khedive desired to make a preferential arrangement—and had everything to lose, with nothing to gain, by impeding the only settlement that could give market value to their paper. The best-informed opinion, both in London and Cairo, also doubted the ability of the Egyptian exchequer to pay 7 per cent. on 59,000,000*l.* out of a reduced revenue of about 7,750,000*l.*—even assuming that with the Moukabala and railways a gross total of 10,500,000*l.* can be maintained—and was, therefore, in favour of a reduction of interest to a uniform 5 per cent. on all but the short loans. The Khedive himself shared this estimate of his own resources, but finally yielded to the arguments of Messrs. Goschen and Joubert and the diplomatic pressure behind them, and by a decree dated November 18, 1876—which now forms the "organic law" of Egyptian finance—substituted their scheme for the abortive measure of May 7.

But, although the settlement thus effected may be open to objection on the ground of too favourable treatment of the Treasury bondholders at the expense of the funded creditors, and divides opinion as to the rate of interest on the unified debt, the merits of the scheme on the whole outweigh its defects. Thus, in view of the loss of income in 1886 by the expiration of the Moukabala and the Village Annuities, and the diminution in the land-tax which will then result, it was necessary to provide for such a gradual reduction of the charge on

the unified debt as will balance it with the available revenue of that year; and this has been done in a manner which is at once ingenious and, on the whole, equitable. Simply a proportionate measure of sacrifice is imposed on all concerned. In return for the retention of their old interest and sinking funds, the holders of the short loans are made to surrender 20 per cent. of their redemption rate, equivalent to 800,000*l.* of capital; the Treasury bondholders give up 3,400,000*l.* of their indefensible premium of 25 per cent. under the decree of May 7; the holders of the Preference Stock, by accepting 5 instead of 7 per cent. on 15,000,000*l.*, forego 300,000*l.* a year; while the deduction for eight years of 1 off 7 per cent. on the unified debt docks 590,000*l.* a year from the interest on that stock—the whole representing an annual sacrifice of 1,128,000*l.*, which the Government, in its turn, renders possible by taxing its resources to the uttermost to pay the high rate of interest imposed on the chief mass of its debt. The calculated effect of these various contributions, *plus* the yearly increasing balances of the Moukabala after payment of the short loans, will be that by the end of 1885, when this terminable revenue expires, the unified debt will have been reduced by the process of redemption from 59,000,000*l.* to 40,000,000*l.*, and the annual charge on it from 4,170,000*l.* in 1877, to 2,900,000*l.* in 1866.[1] As, however, besides the Moukabala and the Village An-

[1] The details of the manner in which the redemption of both the Preference and unified debts is to be effected will be found stated in the decree of November 18, but may be here summarised:—The former is to be paid off in 65 years from Oct. 15, 1876, by the operation of a sinking-fund of 35,744*l.* a year, applied in half-yearly drawings at par, the whole annuity for the service of this debt thus amounting to 885,744*l.* The unified debt is also to be extinguished within the same term and in the same way, but in addition, up to 1886, by public purchase at the market price of the day. If this, however, should exceed 75, then this subsidiary redemption will be

nuities about 2,000,000*l.* of land-tax will also then be lost to the Treasury, the reduction thus ingeniously effected will not be sufficient; and unless the deficit be met by an increase of revenue (which is possible, but not certain) there will be nothing for it but to accept then what had better been accepted now—a uniform interest of 5 per cent. all round.

That this contingency may be equably contemplated, happily results from the *guarantees* which—far above the mere arithmetical details of the measure—constitute its real value to all classes of Egyptian creditors. These are in fact not merely as theoretically perfect, but also, so far as experience has yet shown, as practically efficient as any obligations imposed on an absolute Government could well be; and it is but fair to record that the credit of them belongs quite as much to the spontaneous initiative of the Khedive himself as to the diplomacy of Messrs. Goschen and Joubert. Already, before they had formulated their scheme, his Highness had affirmed its principle as regards guarantees in the two decrees of May 2nd and 7th, and announced his readiness to increase the securities there given to any extent, compatible with his sovereignty, that the bondholders might themselves propose; and when the November project was laid before him, he at once accepted the improved administrative machinery by which it further safeguarded the interests alike of the creditors and of the tax-paying population, for in fact this part of the scheme is almost equally advantageous to both. These guarantees now consist:

1. Of two English and French Controllers-General,

by drawings to be paid off at this price. In the event of the revenue increasing so as to afford a higher figure, the bonds drawn in this latter way will be redeemed at 80.

of whom one is Controller-General of Receipts, and the other of Audit and the Public Debt. The functions and powers of the first of these comprise the collection of all the revenues of the State, and their payment into the several special chests to which they are allocated; and for this double purpose he is invested with full authority over the tax-collectors, nor can any direct tax be levied unless sanctioned by his counter-signature of the tax-paper—a provision that effectually protects the peasants from the arbitrary exactions of the old *régime*. Similarly, the Controller-General of Audit exercises supreme check over the account-keeping of the Treasury and all the public offices into which any revenue is paid; and as a security that the Budget estimates of the year shall not be exceeded, his counter-signature is necessary to all departmental cheques or orders for payment. These two functionaries, whose appointment in the first instance is for five years, form, along with the Minister of Finance, a Finance Committee which controls all contracts involving pecuniary engagements exceeding one-twelfth of the Budget credits of the year, or which would be applicable to more than one year. Both of them are directly responsible to the Khedive, and to him alone.

2. Of a Commission of the Public Debt, also composed of foreigners, recommended, or whose appointments are acquiesced in, by their respective Governments. The duty of this body—which is declared permanent until the whole debt is redeemed—is to receive from the Controller-General of Receipts, and remit to the Bank of England and the Bank of France, the revenue hypothecated for the payment of the debt annuities, and to carry out the provisions for its amortisation. And

3. Of a Commission for administering the railways

and the port of Alexandria. This body consists of two native, one French, and two English members, under the presidency of one of these last. The foreign members are appointed for five years certain, and the whole Commission is declared permanent until the Preference debt secured by these revenues is redeemed. This railway and port administration has (under the Khedive) paramount working power over the two services, and pays the revenue received from both directly into the chest of the Commissioners of the Public Debt.[1]

Nor is this all. By Article IV. of the decree of May 2nd, which forms a substantive part of this amended measure, these powers of the Debt Commissioners are specifically placed under the protection of the new tribunals, whose jurisdiction over the Ministry of Finance "in so far as regards the guardianship of the guarantees of the debt," is there affirmed; thus subjecting the Government itself to an authority which is quite as independent, and relatively very nearly as powerful, as our English Court of Chancery.

The value of such checks on administrative abuse or bad faith cannot well be over-stated, and the settlement of which they are essential conditions—whatever be its defects in other points of detail—may be said to form a foundation for Egyptian credit that will compare favourably with that of any second-rate State in Europe. It has, indeed, this one theoretical element of weakness—that it depends on the good faith of an absolute Prince, who has power to shatter the whole by an arbitrary act. But, as has been influentially remarked, that act would have to be performed overtly,

[1] The details of the functions and powers of these three bodies will be found in full in the decrees of May 2 and 7, and November 18, 1876, in the Appendix.

in defiance of the public opinion of Europe and of the Powers whose good offices the Khedive has invoked to aid him in carrying out these reforms; and the present ruler of Egypt is far too intelligent a man to forget that while his relations to the Porte remain as they are he cannot thus wisely defy either. Engagements whose faithful observance is as much a matter of policy as of honour run little risk of violation; and, if so, the early rehabilitation of Egyptian credit may be regarded as certain. But the reader will not have failed to perceive that the guarantees which ensure this are equally good for all classes of the debt. The Controllers-General and the Commissioners of the Public Debt are common bailees for the whole, and arbitrary interference with their functions in regard to any one of them would be equally fatal to the credit of all three. The only difference, therefore, between the Preference and unified stocks is—that while the revenue which secures the former may be regarded as absolutely sufficient to pay its charges, that which is pledged to the latter may not, in very possible contingencies, suffice to meet its much higher rate of interest. The obvious way to equalise the value of the two stocks would be to lower this last to a figure at which its special securities would be equally certain to cover its annuities, and nearly a consensus of opinion points to a uniform rate of 5 per cent. as that which would both satisfy all the equities and be within the power of Egypt to pay in almost any event. That her creditors prefer an assured 5 to a relatively uncertain 7 per cent. was shown by the eagerness with which the Preference bonds were taken up, and is still evidenced by the wide margin of market value between the two stocks. Of course, if experience bears out Messrs. Goschen and Joubert's anticipations of revenue,

there is no reason why the Cairo Government should not be held to its bargain; but the hope is at least a sanguine one that the humane and law-respecting administration now at work will realise as much as was *courbashed* and tortured out of the Fellahs by the late Moufettish. It would have lessened the risk, therefore, of another shock to Egyptian credit if the recent settlement had fixed the whole interest at 5 per cent. all round except—on the short loans—with the provision either for its increase to a higher rate if the Debt Commissioners found the revenue could afford it, or for the application of any surplus to a reduction of the debt. Still, the administrative safeguards which now protect their interests afford holders of the unified stock ample assurance that if the country can pay 7 per cent. they will get it, and that if it cannot they will receive 6, 5, or 4,—a certainty that gives an element of value to their stock which it never possessed before. The power of the Controllers-General, too, over the assessment and collection of the taxes will protect the peasantry from the ruinous exactions which oppressed them under the old system; while the share of the same officers in framing the Budget, and subsequently controlling the departmental expenditure, should equally operate as a check on every branch of the administration, and prevent the illicit growth of a new floating debt, pregnant with fresh embarrassment and real dangers for the future. If this prove so, the Government itself, quite as much as its creditors, may be congratulated on a measure which—whether the unified 7 per cent. stand or be reduced—undoubtedly constitutes a valuable reform.

Thus, while the cost of the Suez Canal and an excessive outlay on public works—which in a few years,

however, will be nearly all remunerative—coupled with bad management and other wasteful expenditure, have contributed to bring Egypt perilously near to the brink of national bankruptcy, a fair review of the country's resources, and of the new administrative reforms, suggests confidence, not merely in the power, but in the firm purpose of its present Government, to retrieve its financial position and honestly pay its debts, notwithstanding the scandalously usurious terms on which many of these have been incurred.

CHAPTER VII.

THE DÏARAS.[1]

In all, Seven of these Administrations—Only Two Responsible for the Daïra Debt—The Daïra-Sanieh—Its Great Estates and Factories—Their Defective Management—Its Income and Expenditure—The Daïra-Khassa—History of the Debt—Inter-relations of both with the State Treasury—Crisis of Last Year—Exclusion of Daïra Debt from the Goschen-Joubert Scheme—Investigation of Assets and Liabilities—Recent Arrangement for Redemption of the Debt.

In extent of their domains, revenues, and unhappily also of their debt, these administrations rank next after the State Government. Up till last year, indeed, they formed virtually a branch of it, the financial relations of the two departments being so intermixed as to make it difficult to say where the one began or the other ended. But by the decree of November 18, which provided for a settlement of the State debt, this practical fellowship was severed, and the Daïras now form distinct and purely private administrations, as their name imports. They include the whole of the vast estates, factories, and other property of the various members of the Viceregal family, and number in all seven, called respectively the Daïra-Khassa, or that of the Civil List; the Daïra-Sanieh, of the personal estate of the Khedive; the Daïra-Validé, of the Queen-mother; the Daïra-della-Famiglia, of certain general family property; the Daïra-Tewfik Pasha, of the heir-apparent; and the Daïras-

[1] *Anglicé*, "administrations." They are respectively managed by directors and a numerous staff of clerks, the chief of the Daïra-Sanieh having nearly all the importance of a cabinet minister.

Hussein Kiamil Pasha and Hassan Pasha, of his Highness' second and third sons, now Ministers of Finance and of War. Of these, however, only the first two are of any external importance, as they alone are responsible for the large aggregate of obligations known as the Daïra debt. The property distributed among the other five originally formed part of the general private estate of the Khedive, from which what now belongs to his sons was detached as they in turn became of age. But in extent and revenue value, the remainder still owned by the Daïra-Khassa and the Daïra-Sanieh much exceeds the aggregate of that now held by the others, and for the purposes of this chapter it will be sufficient to sketch briefly the estates and liabilities of these two principal administrations.

Taking first the Daïra-Sanieh, which is much the wealthier and more important of the two, a recent investigation reckons its estates at 434,975 feddans. Of this total acreage, 89,000 feddans are uncultivated, 40,000 of these being in Lower Egypt, and the remainder scattered through the various cultivated estates mostly above Cairo, including the sites of the large factories and other establishments erected on these latter. Of the whole, a large partially-reclaimed tract (called the Garbieh estate) of 80,000 feddans, in Lower Egypt, is let to tenants and yields a rental of 8,000*l.* a year; while 83,000 feddans of wholly cultivated land are also let at an average rent of about 1*l.* 10*s.* per feddan. The remaining 182,000 feddans, which include the Upper Egypt sugar estates, are farmed directly for account of the administration. To this particular Daïra belong the great sugar factories and rum distilleries in the Upper Valley and the Fayoum, from which so large a part of its revenue is derived. There are in all

nineteen of these establishments—viz., three on the Erment estate (at Erment, Dabayeh, and Matanah), which extends over above 40,000 feddans on the left bank of the Nile, between Thebes and Assouan, but of the three only two, with a couple of mills each, are now worked; one at Rhoda, the chief station on the largest sugar estate, stretching along the same bank for nearly ninety miles—from Mellawee on the south to Beni-souef on the north—with a total area of 157,000 feddans; this factory consists of four mills, of which only three are worked: one at Abougourgos, of four mills, also with one idle; one at Bibeh, with four mills, of which, similarly, only three are worked; one at Feshun, with four mills, all of which are at present idle, the canes being taken to those of the neighbouring districts; one at Maghagha, of four mills, only three of which are employed; one at Abba, with four idle mills; one at Beni-mazar, with four mills also for the present not worked; one at Mattaïe, of four mills, three of which are worked; one at Massarat-el-Samalout, also of four mills, of which one is idle; one at Minieh, of four mills, only three of which are employed; one at Farshout, with two mills; one at Dameris, of two mills; one at Salikos, of four mills; and two in the Fayoum, at Abouksa and Massaret-Doudeh, of two mills each, but only the former of which is now worked, besides two others and a treacle factory for which the machinery is on the ground, but which have not been erected. Of these nineteen establishments only those at Farshout, Erment, Dameris, and Rhoda were in existence before the accession of the present Viceroy, whose enterprise is therefore to be credited with the remaining fifteen. Of the whole, fourteen were put up by French and the remainder by English

engineers,[1] who also supplied the machinery for those not yet built. The total cost of those erected during the present reign may be roundly estimated at about 6,000,000*l.* During the crushing season of two months and a half, they employ an average of two thousand hands each, and work up the total annual produce of about forty-six thousand feddans of land, yielding a gross revenue of about 700,000*l.*,[2] according to the fluctuations in the market price of sugar. There is no doubt whatever that with more careful management and better checks upon fraud, this amount might be considerably increased at a much lower working cost. As it is, the number and size of factories are much in excess of the cane available for manufacture, and their position near the trunk line of railway, instead of being in the centre of the respective estates, involves costly carriage either on camel-back or by steam tramways. Considerable economy has, it is true, been recently effected by the use of crushed cane-stalks for fuel, instead of coal, in driving both the tram-locomotives and the factory machinery, and also by the utilization of refuse for manure. But the margin of waste is still great, and neither that nor other abuses which more effective supervision might prevent, can well be checked under the present system of management. In the absence of complete and trustworthy accounts, the net profits on this great industry can be only approximately stated. The cultivation of the cane, including planting and cutting, costs about 7*l.* per feddan, and the manufacturing cost of the sugar—which varies considerably in

[1] Chiefly by Messrs. Easton and Anderson, of Erith, under the personal superintendence of Mr. H. C. Anderson, who has constructed several other fine works for the Daïra, in Upper Egypt and at Ghizeh, opposite Cairo.

[2] The produce of the past season is said to have yielded nearly 800,000*l.*, owing to the comparative failure of the beet-root crop in France.

different factories—averages about 3*l.* 10*s.*; while the total gross yield of sugar and treacle, as set down cumulatively in the official statement of the general agricultural produce of the year, is about 33*l.* per feddan; thus ostensibly leaving a profit of above 22*l.* per feddan to pay interest on the capital, land-tax, and cost of carriage to market, which under the new administration of the railways will henceforth be a real, and not merely a paper, charge. But local independent estimates, while admitting that such profits might be earned if the factories were in private hands, reduce the actual gains of the Daïra, as now administered, much below this figure. The quality of the sugar produced is excellent, and in the market ranks one number above West Indian. Only about two thousand tons of refined—*i.e.*, loaf—sugar are now made annually, at the Minieh factory alone; but the white crystallised and brown sugars of the other mills command respectively the highest prices of their class. In Alexandria this native produce, from its greater sweetness, competes successfully with French sugar, although the latter receives from the French Government a bounty in the form of a drawback which more than pays the Egyptian Customs duty. Except the engineers, who are mostly English, the whole of the large army of hands employed on the works are natives, many of whom have acquired considerable skill in the manufacture, and have therefore replaced foreigners at higher salaries. The wages of the rank and file range from about 6d. to 11d. a day—part paid in brown sugar or treacle—with a ration of bread; but although receipts for full payment are exacted from the respective sheikhs, and the amount is duly debited to the Daïra, it is notorious that much of the money earned never reaches the fellahs'

pockets. A large proportion, moreover, of the hands employed are furnished by *corvée*, and are therefore helpless against this and every other abuse. Nor is it the working people only who suffer: as the factories are now managed it is more than doubtful if any possible development of this industry can ever pay the Khedive a fair dividend on their enormous first cost. In his own interest and that of the country, his true policy would be to sell or lease the whole to private capitalists, under whose more careful control local opinion is confident they would yield large returns. As it is, they are splendid monuments of his Highness' private enterprise, but commercially they have as yet proved only a half success.

A recent official statement gives the following estimate of the whole income and expenditure of this Daïra, including receipts from and outlay upon the land let to tenants, and that directly farmed for account of his Highness, as well as the produce, gross and net, of the sugar factories:

Income.		Expenditure.	
Lands let	£130,000	Taxes	£150,000
Cotton	85,000	Agricultural Expenses	400,000
Sundries	85,000	Factory ditto ...	250,000
Winter Crops ...	200,000		£800,000
Sugar	700,000	Balance ...	400,000
	£1,200,000		£1,200,000

The property of the Daïra-Khassa is much less extensive, and yields an average total revenue of only about 50,000*l.* a year. It is situated in Lower Egypt, chiefly in the districts of Tanta and Garbieh, and consists in all of some 50,000 feddans, of which 10,000, of

good quality, are farmed by the administration with a reported net profit of only about 2*l.* a feddan, while the inferior remainder is let to tenants at an average of about 15*s.* per feddan. Here again it is evident that better management, with adequate checks upon fraud, would greatly improve the outcome of these estates, as 2*l.* per feddan is far below the average of profit from good land all over the country; and it is said that a moderate but judicious expenditure in levelling and better irrigating the 40,000 feddans let to tenants would more than double the value of those parts of the property, much of which would grow excellent cotton, while nearly all are within easy reach of railway or water carriage for their produce to Alexandria.

Taking, however, the present net revenue of these estates at their reported average of 50,000*l.*, we have for the two Daïras an estimated clear income of 450,000*l.* a year,[1] against a funded and floating debt of about 9,000,000*l.*

The history of this latter large total differs little from that of the State debt proper, revealing, as it does, similar incidents of usury in the terms of borrowing and of improvidence in the use of the money raised. The first of the three loans which form the funded part of the debt was negotiated in 1865 (though not issued till early in the following year), partly to pay for Halim Pasha's estates, purchased in the previous year, and partly to repair the loss done to these and the Khedive's other domains by the destructive cattle murrain of 1864–5. The nominal amount of this operation—which was negotiated by the Anglo-Egyptian Bank, and is

[1] Last year, before the difficulties of the Daïra had reached their subsequent complication, Mr. Cave estimated its net revenue at 422,000*l.*, after interest on its funded debt had been paid.

known on the market as the "Viceroy's Loan"—was 3,387,000*l.*; it was a 7 per cent. stock redeemable by half-yearly drawings, in fifteen years, and was issued to the public at 90. No particulars of the net sum realised from it have been published, but deducting the issue discount and the contractor's commission and other charges, it probably did not exceed 2,750,000*l.* This loan was secured on the estates of the Daïra-Khassa, together with those of Halim Pasha, for the purchase of which about 1,000,000*l.* of its proceeds was applied. The second loan was contracted in 1867, with rather a political than an economical object. Up till the change in the order of succession, in the previous year, the heir to the throne was Mustapha Fazyl Pasha, the brother of his Highness, who possessed large estates in Egypt. On the change being effected it was thought inexpedient that this personage should continue to exercise the great territorial influence attaching to these domains, and an arrangement was therefore come to by which he ceded them to the Khedive for a payment of 2,080,000*l.* in 9 per cent. bonds, also redeemable half-yearly in fifteen years. A loan for this amount—commonly called the "Mustapha Pasha Loan"—was therefore issued through the Imperial Ottoman Bank, at 90 per cent., secured on the property purchased. The third operation, known as the "Khedive Loan," took place in 1870, for 7,142,860*l.*, nominal. This was a 7 per cent. stock, redeemable in twenty years, and was issued through Messrs. Bischoffsheim and Goldschmidt at 75 per cent.; but of its proceeds at this price (5,357,145*l.*) the Daïra only received 5,000,000*l.*, the contractors charges again absorbing the balance. The object of this operation—which is secured on 157,000 feddans of the Daïra-Sanieh estates—was to develop the cultivation of sugar-cane,

and erect the largest of the great factories now at work, twelve of which have been so built within the past seven years.

But onerous as were the conditions of these foreign loans, those under which a large floating debt simultaneously grew up were heavier still, and were not lightened by a system of cross-acceptances with the Treasury, from which, to say the least, the Daïra was no gainer. At length, concurrently with the culmination of the State difficulties in the spring of last year, the Daïra—*i.e.*, Sanieh and Khassa jointly—was also obliged to suspend payment, till some practicable arrangement with its creditors could be effected. The 1865 and 1867 loans having been semi-political in their object, had already, with the revenue pledged for their redemption, been taken over by the Government, and were therefore substantively included in the settlement of the State debt embodied in the decree of May 7th. When that impossible measure however fell through, this partial relief of the Daïra vanished with it, and was finally extinguished by the subsequent Goschen-Joubert arrangement, which excluded these *quasi*-personal debts altogether, leaving the Daïra itself to provide for them as best it might. Thereupon a host of private creditors, taking advantage of the 10th article of the Convention on which the new tribunals are founded, which subjects "the Government, the Administrations, and the Daïras of his Highness the Khedive, and of the members of his family, to these courts, in suits with foreign subjects," brought actions to recover payment in full of their claims. The courts had no choice but to exercise the jurisdiction thus given to them; but execution of their judgments was necessarily suspended, as a forced sale of any part of the property would have been

equally ruinous to the Daïra itself and to all other classes of its creditors.

Since then, however, an arrangement has been come to, as a sort of pendant to Messrs. Goschen and Joubert's scheme, which provides equitably for the whole of these debts. A careful examination of the revenue-value of the estates shows that they can even now pay 5 per cent. interest at least, and justifies the belief expressed above that under better management still larger net proceeds may be realised. It has therefore been virtually settled that the administration of the property shall be placed in the hands of two European delegates of the creditors, and one native named by the Khedive, who shall jointly control the whole, and yearly publish regularly audited accounts. If it be found that the revenue will pay more than 5 per cent., the next 1 per cent. is to be applied in redemption of stock by purchase in the market; and if the income should exceed the 6 per cent. thus absorbed, the next 1 per cent. again is to be distributed among the bondholders as a supplementary dividend; while if it should still exceed 7 per cent., all surplus above that will be applied in the further reduction of the debt. If, on the other hand, the revenue should in any year not yield 5 per cent., the Khedive pledges, for payment of the deficit, his Civil List of 300,000*l.*, which, if not called upon under this guarantee, will give an annual subvention of 1 per cent. (90,000*l.*) to be applied in the redemption of stock, independently of any portion of the Daïra revenues that may be available for the same purpose; and this subvention is to remain in force until the latter reach 7 per cent. When the total amount of the debt shall have been reduced by the operation of this sinking-fund to

5,000,000*l.*, the original interest of 7 per cent. is to be resumed, with a fixed sinking-fund of 1 per cent., till the whole be paid off. The satisfaction with which this arrangement has been received by the Daïra creditors increases regret that substantially similar terms were not accepted in settlement also of the State liabilities, instead of fixing the Treasury hard and fast with 7 per cent. on more than two-thirds of an inequitably-increased total of its debt. If, however, the rate of interest imposed on the Malieh should be found beyond its power to pay, the compromise thus effected with the Daïra will have the further merit of supplying both a precedent and a basis for a modification of the Goschen-Joubert scheme, without affecting the administrative guarantees which constitute the chief value of that measure.

CHAPTER VIII.

COMMERCE.

Steady Growth of Egyptian Trade—Great Increase during Present Reign—Review of Ten Years ending 1875—Exports—Their Chief Details—Ninety per cent. of the whole shipped from Alexandria—Principal Foreign Markets—Diminution of the Transit Traffic compensated by Growth of General Trade—Imports—Whence chiefly received—Their Increase an Evidence of Augmented National Wealth—Probable Re-adjustment of the Customs Tariff.

However the problem of Egyptian finance may ultimately solve itself, its difficulties have at least been in no way caused by any decline in the national trade. Not only has this, till within the past eighteen or twenty months, more than kept pace with the rapid growth of the revenue, but in most of its branches the improvement continues, and—barring only the recent depression, during which the commercial movement in Egypt has shared in the general stagnation of trade everywhere—the condition and prospects of the whole are perhaps as solidly satisfactory as at any time since the death of Mehemet Ali. There have been spurts of much greater activity and larger profits; but until weakened by this temporary disturbance, the general tone of both the inland and foreign trade of the country has seldom been sounder than during the past year. If revenue, therefore, has recently expanded faster than trade, the fact has signified no serious decline in the latter; but has simply meant that, under pressure of debt-burthens incurred at ruinous rates, and in any case more rapidly than the country could bear them, taxation

has outstripped the commercial development on which it should mainly feed, and in the rear of which good government should keep it. That the trade of Egypt has in fact, till latterly, grown faster than its budget-estimates, is shown by the chief figures of the national account any time during the past fifteen years; and equally so if the retrospect be carried farther back. In 1862, when the revenue was under 5,000,000*l.*, the total value of exports and imports—exclusive of goods in transit—only slightly exceeded 6,445,000*l.*, while ten years later, in 1872, they had risen respectively to 7,593,645*l.* and 18,323,800*l.*, with the balance of trade increasing largely in favour of Egypt. In 1873 and 1874, the trade totals, though showing further marked advance on the previous years, were nearly stationary; but in 1875, exports fell off above 2,000,000*l.*, reducing the double total to 18,500,000*l.*, while the revenue further increased from 10,689,070*l.* to 10,772,611*l.* last year.

The commercial expansion thus evidenced began with the present reign, and for such a review of its progress and chief incidents as can be here offered, it will suffice to trace the movement through an average decade of that period, with occasional reference to some features of preceding years. As no complete returns have been available for later than 1875, the decade ending with that year will most fairly serve as an average of the whole, since it excludes both the undue inflation caused by the American war and the temporary depression of last year. Tabulated statements covering a longer period will be found in the Appendix.

No returns whatever have been published—nor till quite lately were even prepared—of the inland trade

of Egypt; but this is so inter-dependent on its foreign commerce, that a sketch of the latter practically tells the economic history of both. Even for the foreign trade, too, only complete details are published of that portion of it which passes through Alexandria; but that, again, comprises above 90 per cent. of the whole, and what remains can be estimated with sufficient approximate accuracy *en bloc*.[1]

The three staple *Exports* from Egypt are cotton, cereals, and sugar; and after these come, at a long distance, a host of minor commodities of which it will suffice to notice only the more important. Turning to the Customs returns of Alexandria, we find *Cotton* heading the list of the whole with 2,615,120 quintals shipped in 1875. The crop of last year was much larger, but as no official return of it has been available, neither its gross yield nor the quantity exported can be stated. With one or two annual exceptions, the production and export of this staple have been steadily on the increase since the abnormal spurt of 1864–5. The exact rate of this will be seen from the following note of the shipments from Alexandria during the ten years ending 1874–5:

	Quintals.		Quintals.
1866	1,288,797	1871	1,966,154
1867	1,260,946	1872	2,108,509
1868	1,253,593	1873	2,418,484
1869	1,391,493	1874	2,599,685
1870	1,351,853	1875	2,615,120

The great fall, however, in the price of cotton within this period not only deprives the increase thus indicated

[1] The main difficulty of tabulating the movements of Egyptian trade lies in the confused and unsystematic way in which the Customs accounts have hitherto been kept—sometimes according to weight, and sometimes

of all fiscal value, but occasioned an actual loss of revenue as between the first and last years of the decade. In 1866 the Liverpool quotation for Egyptian *Fair* was 21¼*d.*, which fell in rapid annual succession to 16$\frac{1}{16}$*d.*, 10$\frac{7}{16}$*d.*, 12$\frac{9}{16}$*d.*, 12$\frac{1}{16}$*d.*, 8$\frac{3}{16}$*d.*, 10$\frac{7}{16}$*d.*, 9⅞*d.*, 8¼*d.*, and 8½*d.* in 1875. But the increase in the *quantities* exported none the less evidences great agricultural (and so commercial) progress during the period. About four-fifths of the cotton thus shipped was sent to England, the balance going to France, Italy, Austria, and Russia. But in addition to the raw staple, cotton seed forms also a large article of exportation. In the same decennial period the following quantities of this were shipped:

	Ardebs.		Ardebs.
1866	860,090	1871	1,203,756
1867	826,637	1872	1,274,765
1868	753,406	1873	1,058,111
1869	823,707	1874	1,528,693
1870	917,688	1875	1,474,968

Unlike that of cotton itself, the price of this rose largely during the decade—from 60½ piastres per ardeb in 1866 to 81½ piastres in 1869, and closing at 80½ piastres in 1875. For the seed, as for the staple, Great Britain was again the chief customer, followed at a long distance by France. To these figures have to be added nearly 70,000 quintals of oil-cake, chiefly made up of the refuse

according to number, or even the size of the parcels, without reference to their value; while the periods referred to are often without notice as to which is meant, according to the Coptic or to the Gregorian calendar, even before the adoption, last year, of the latter for all administrative purposes had removed this element of confusion. Care has, however, been taken to render the figures given in the text as accurate as a collation of the official returns with independent private estimates can make them.

seed of this crop, and shipped mainly to the same destinations.[1]

Cereals rank next, but the produce and consequent exportation of these has been much less constant than those of cotton. In 1862 the total yield was 2,300,000 ardebs, which, during the cotton mania of the next couple of years, fell off so largely that the quantity grown was actually insufficient for home consumption, and the government had not only to forbid exportation, but to encourage imports by suspending the Customs duty. This continued till 1866, when exportation was resumed, reaching its highest total in 1872, when 1,800,000 ardebs of all varieties were shipped from Alexandria, but thence gradually falling to 800,000; and in 1875 *Beans* topped the list with the following yearly quantities during the term :—

	Ardebs.		Ardebs.
1866	42,527	1871	711,841
1867	614,664	1872	664,348
1868	745,058	1873	268,527
1869	505,146	1874	334,330
1870	335,268	1875	490,257

The highest mean price of the decade was 211 piastres per ardeb in 1874, and the lowest 152 piastres in 1872, the closing price of 1875 being 195 piastres. Of the whole quantity exported Great Britain took more than eleven-twelfths, and France about two-thirds of the small remainder. *Wheat* followed with :

	Ardebs.		Ardebs.
1866	12,555	1871	464,669
1867	798,202	1872	879,345
1868	1,147,147	1873	612,723
1869	421,933	1874	186,723
1870	137,815	1875	836,997

[1] These figures of the cotton crop, however, supply no measure of the

The difference between these annual totals is mainly explained by the relative "ups and downs" of the Nile during the period, a "good" or "bad" river for the year about equally affecting the crop and the consequent export of the twelvemonth. Differently from those of cotton, the prices of this article rose, with some fluctuations, from an average of 180 piastres per ardeb in 1866 to 242 piastres in 1874, but receded in the following year to 192 piastres. Here again more than nine-tenths of the whole quantity shipped went to Great Britain, and about three-fourths of the balance to France. *Maize* fell far below these other crops, only 512,972 ardebs having left Alexandria during the ten years, of which 431,094 ardebs found a market in England, 35,604 ardebs in France, and the rest elsewhere. The highest price was 211 piastres in 1874, and the lowest 152 piastres in 1872. *Barley* figured for still less, with a total of 414,327 ardebs, of which Great Britain took nearly three-fourths, and France most of the remainder. *Rice* contributed 34,085 ardebs, nearly the whole of which went to the Greek islands, Constantinople, and other parts of the Levant. But this forms only a part of the export of this article, which is also sent largely to the same markets from Damietta; but no complete return of the quantity shipped from that port has been available. Lentils, chick-peas, peas, and helba, which complete the list of the edible grains, added altogether only 197,799 ardebs to the tale, and need not therefore be particularised. For them, as for the larger crops, Great Britain was also the chief customer, taking nearly nine-

great increase in the growth and export of the staple during the present reign as compared with the previous thirteen years. The details of the two periods showing, as mentioned in another chapter, a comparative increment of 257 per cent. during the latter over the former.

tenths of the whole, while France absorbed most of what remained.

The returns of the export of *Flax* show how largely cotton has encroached on the culture of this once important crop, for which much of the soil of Egypt is admirably adapted, and which might still, in point of profit, compete favourably with the more popular staple. A total of only 20,272 bales was shipped from Alexandria during the ten years, of which 16,000 went to England, and most of the remainder to Italy. The highest and lowest prices during the term were 192 piastres per cantar in 1869, and 141 piastres in 1871. The produce of the crop was, however, increased by 30,120 ardebs of linseed, nearly all sent to Great Britain, of an average mean value of 264 piastres per ardeb.

The production and export of *Sugar* on any large scale date only from 1867, when the erection of the first of the great Daïra factories raised the manufacture of this article to the first rank of native industries, and since then the culture of the cane and its mercantile development have made rapid annual progress. Within eight years the quantity exported rose from 8,194 sacks (about 55,000 quintals) to 159,185 sacks (equal to 986,000 quintals) in 1875, after having attained 433,853 sacks in 1874, and 269,378 in 1872. The crop of last year showed a large recovery, but no exact return of its yield has been obtained. So prodigious an extension in this particular element of trade has few precedents in commercial history, and shows how readily Egypt might be advanced to the very first rank among sugar-producing countries. As it is, the moderate average of the quantity exported in 1875 places her nearly abreast of Brazil, which supplies about one-

twelfth of the whole sugar consumption of the world. The mean auction-price in Alexandria varied during the seven years from 87½ piastres per cantar for the first quality, in 1869, to 118⅓ piastres in 1875, with wide fluctuations between these rates in the interval, according to the rise and fall of the English and French markets, to which most of this produce was shipped. Of the molasses made only 2,384 cases were exported in the latter half of the decade, 1,085 of these being entered to 1875. A considerable quantity of rum was also distilled at the four factories of Abouxa, Magagah, Minieh, Mattai, and Erment, but as this was all consumed in the country, none of it figures in the Customs' returns.

The export of *Natron* (muriate of soda) reached 16,485,296 okes (of 2¾ lbs. each) in the ten years, ranging from 1,684,190 okes in 1866 to 2,177,440 okes in 1875, with wide fluctuations in the interval. Italy and Austria were the chief markets for this article, the mean price of the two qualities of which averaged in Alexandria about 8 piastres per 60 okes. No *Salt* appears in the returns of the latter port, but about 4,000,000 quintals (worth roundly 40,000*l.*) are annually exported from Suez to Djedda, for the Hedjaz, Aden, and Bombay, with a ready market in all three for a much larger quantity, if the vast deposits of rock salt below Suez were adequately worked.

Up to 1872 the shipment of *Bones* had formed a considerable feature of this branch of Egyptian trade,—mummy bones contributing nearly as much as those of modern cattle to the yearly total of 10,000 tons sent chiefly to England. Since then, however, the pillage of tombs for this purpose has been prohibited, and the sugar refineries of the Daïra now consume as

much of this article as can be legitimately collected. *Horns* have also dropped out of the list since 1871, during which and the preceding five years 830 bundles had been shipped, mostly to Italy, England, and France; but *Hides* yielded a steady annual supply of nearly 7,000 bales, for which Italy, Austria, France, and England were the chief customers in the order mentioned. Since 1869, *Flour* and *Bran* figure respectively for 98,320 and 108,297 sacks, most of the former of which was shipped to Syria and England, and the greater part of the latter to Italy. *Wool* was steadily exported during the decade at a mean annual total of 5,334 bales, more than three-fourths of which went to England; and *Rags*, over and above the consumption of the Boulak paper mill, to the yearly extent of 16,036 bales, also for the greater part to the all-absorbing market of Great Britain. The export of *Dates* with a total of 50,477 cases[1] for the ten years—increased from 1,285 cases in 1867 to 10,634 in 1874, the shipments of 1875 however falling off to 5,794. *Henna* similarly contributed 18,357 parcels, for which France was the principal customer, only forty parcels of the whole being taken by English buyers; and *wax* 5,907 cases—with an increase of from 561 in 1866 to 1,027 in 1875—nearly one-half of which went to Italy, and most of the remainder to Austria. *Saffron*, chiefly sent to Trieste, furnished an average yearly quota of 300 parcels, and *Opium* the small total of 101 (in very fluctuating annual quantities), divided almost equally between the English, French, and Austrian markets.

These and some minor articles constitute, as has

[1] As already remarked, from the imperfect manner in which the official returns of the whole of these articles have been made out, it is impossible to ascertain either their exact weight or their separate values, although the duty is supposed to be *ad valorem*.

been said, above nine-tenths of the whole exports from Egypt, what remains being shipped from the smaller ports of Damietta, Port Saïd, Suez, and Cossier, or sent through the land custom-house at El-Arish into Palestine. Souakim and Massowah also do a considerable share of the trade with Djedda and Yemen, but chiefly for produce of the Soudan and Abyssinia, and not much for that of Egypt proper. The principal exports from Damietta —whose returns rank next, at a vast distance, after those of Alexandria—are rice, dried fish, beans, dates, and linseed, which are mostly shipped coastwise to the Levant and the Greek Islands, to a round yearly total value of 550,000*l.* Cossier follows with an average of about 400,000*l.* Suez (since the virtual extinction of the transit trade) with less than half this amount; and Port Saïd with about as much, but promising rapidly to attain the second place.

Besides the commodities exported from these various outlets—which are nearly all products of Egypt proper —large quantities of other merchandise are brought by caravan, or by way of the Red Sea, from Nubia, the Soudan, Abyssinia, the Hedjaz, and Yemen, which are in great part exported to Europe, and so swell the gross trade returns of the year. The most important of these are coffee, ivory, mother-of-pearl, gum, skins, incense, wax, ostrich-feathers, tortoise-shell, senna, tamarinds, and other drugs. Cairo is the chief *entrépôt* for the whole of these—the delivery-port, so to speak, at which the fleets of the desert from Sennaar, Kordofan, Darfour, and the other remote southern provinces land their camel-borne cargoes. Already there has been a great development in this trade during the past dozen years, which cannot fail to be further largely stimulated by the Soudan railway and the effective opening of navigation on the

Upper Nile. The present caravan traffic alone with these sub-tropical regions brings more than 1,000,000*l.* worth of various goods to Cairo annually, exclusive of the considerable quantities imported through Suez from Souakim and Massowah. Of the whole, 94,488 fards of *Coffee* were re-exported from Alexandria during the decennial period under notice, with a marked annual decline, however, since 1871, when the quantity was 13,428 fards against only 3,763 in 1875. For this article France and Austria were the chief markets, Great Britain ranking a low third. *Ivory* figures for 7,018 parcels (roundly worth £350,000), nine-tenths of which was taken by England; *Mother-of-pearl* for a mean annual quota of 5,346 parcels, two-thirds of which went to Austria, and most of the remainder to England and France; *Gum-arabic* for 31,662 fards a year, taken chiefly by Great Britain, with Austria, France, and Italy ranking next as customers; *Incense* for a mean of 1,289 fards a year, with a great decline in the quantity since 1872; *Ostrich-feathers* for a similar average of 544 cases, of which France and England were the largest buyers; and *Senna* for a decennial total of 17,357 packages, shipped chiefly to Austria and Great Britain.

The sum of the whole export movement during each of the ten years ending 1875 may be thus tabulated:—

1866 ...	... £9,723,564	1871 ...	...£10,192,021
1867 ...	... 8,623,974	1872 ...	... 13,317,825
1868 ...	... 8,094,974	1873 ...	... 14,208,882
1869 ...	... 9,089,866	1874 ...	... 14,801,148
1870 ...	... 8,680,702	1875 ...	... 12,730,195

The significance of these returns is all the greater that they comprise little or none of the old transit trade, which now passes almost exclusively through

the Suez Canal. Thus raw silk fell from 5,147,770*l.* in 1871, to 48,572*l.* in 1875; Indian manufactured silk from 112,317*l.* to 20*l.*; tea from 157,342*l.* to 5,565*l.*; and indigo from 148,000*l.* to 50*l.* within the same period, and so with nearly all the Indian and Chinese produce formerly landed at Suez, and re-shipped at Alexandria, which added roundly 5,000,000*l.* a year to this side of the Egyptian Customs returns, without however paying anything but the cost of railway transport and the light transit dues.

Passing to *Imports*, we meet with similar evidence of a steadily improving trade during the period under review. But while the ratio of expansion on this side has been so much less as to leave a large and yearly growing balance of trade in favour of Egypt, the increase has still indicated a greatly augmented consumption of articles of comfort and even luxury during the term, as is, in fact, shown by the appearance of a class of commodities in the later returns which had no place in those of fifteen or twenty years ago. The contrast between this side of the account and its figures formerly, will be still more striking if the whole reign of the Khedive be compared with the preceding thirteen years;[1] but the movement of the decade ending September 10, 1875, will suffice to show practically the present condition of this branch of Egyptian trade. The figures, as before, exclude the transit traffic:

1866	...	...£4,662,210	1871	...	...£4,512,143
1867	...	... 4,399,097	1872	...	... 5,005,995
1868	...	... 3,582,969	1873	...	... 6,127,564
1869	...	... 4,021,601	1874	...	... 5,322,400
1870	...	... 4,502,969	1875	...	... 5,694,820

[1] See Appendix No. 5 to Mr. Cave's Report.

The chief articles for which Egypt thus pays to foreign markets roundly 5,500,000*l.* a year are manufactured cotton goods, silk, coal, charcoal, building materials, oil, wine, spirits, and machinery. Great Britain stands first as a source of supply for about 45 per cent. of the whole, Turkey and Syria next for about one-fifth, France for rather more than one-tenth, Austria for about a fifteenth, Italy for an eighteenth, and Barbary, Greece, Belgium, Russia, and Sweden for the small remainder in the order mentioned. Most of the madapolams, long cloths, grey T cloths, and cotton yarn are of course from Manchester, although both France and Austria now compete with us in price, if not in quality, for these articles. Nearly the whole of the large annual average of 500,000 tons of coal and coke is also furnished by England, while Turkey and Syria supply most of the considerable domestic consumption of charcoal. Wood for building purposes comes from Italy, Austria, Sweden, and Turkey for a total annual value of about 350,000*l.*; stone of various kinds from Italy and Austria for about 150,000*l.* a year; oil—the better qualities from Italy, and the inferior from Barbary, Syria, and Greece — for about 160,000*l.* annually; wine and liquors from France, Italy, and Greece; silk, raw and manufactured, from France and Italy for 220,000*l.*; and machinery from England and France for about 170,000*l.* Of other articles, tobacco and cigars reckon for about 130,000*l.* a year; various fruits for 160,000*l.*; provisions for 170,000*l.*; iron and other metals for 250,000*l.*; candles (nearly all from France and Belgium) for 60,000*l.*; hardware for 100,000*l.*; broadcloths for about 50,000*l.*; carpets for 70,000*l.*; paper for 60,000*l.*; and flour, strange to say,

for nearly 30,000*l.*[1] a year, from Trieste, Odessa, and Marseilles.

While, therefore, the imports of the decade ending 1875 exceeded those of the previous ten years by more than 15,600,000*l.*, they were 61,631,506*l.* less than the exports of the same period, which from 59,122,659*l.* in 1856–65, rose to 109,462,674*l.* in 1866–75, leaving, as has been said, a balance of trade in favour of Egypt which, during the latter half of the decade, exceeded an average of 7,500,000*l.* a year, or *more than twice the value of the whole exports from the country* during any but two years of the reign of Saïd Pasha. Of this, no doubt, a considerable portion returned to Europe in payment of the debt annuities, but the residue still represents an addition to the national wealth larger than half the entire revenue at the accession of the Khedive. Such a result supplies its own comment, and abundantly justifies the averment with which this chapter opened—that whatever may be the temporary financial embarrassments of Egypt, they have had no part of their origin in any decline of her trade. The resources of the country were never in modern times more abundant, nor its commercial movements more healthily active than at this moment, when the market price of its unified debt is yielding an interest of 14 per cent.

As regards the Customs' duties on this large aggregate of trade, these are regulated by the existing commercial treaties between the Porte and the foreign Powers, which fix the import duty at 8 per cent., and the export rate at 1 per cent.; but under his new prerogative the Khedive can now negotiate his own

[1] These various amounts are, of course, merely approximate annual averages of the ten years' trade.

tariffs; and it is expected that those at present in force will shortly be readjusted in a manner which, while advantageous to revenue, will also benefit trade by a more equitable system of valuation than is now applied. Certain it is, too, that if the Egyptian Government is to keep faith with its creditors, it must be permitted to enforce the collection of its Customs' revenue without the vexatious restrictions with which not a few of the foreign Consuls at present practically assist fraud at Alexandria.

CHAPTER IX.

AGRICULTURE.

This has always been the Staple Industry of Egypt—Its Present Principal Conditions—Land Tenure—Its Varieties and Chief Incidents—Extent of Land held under each—Their respective Rent Charges—Large Taxable Reserve in the Tithe Lands—Labour Supply—Sufficient with certain Reforms — Wages — Water-supply wholly dependent on the Nile — "Good" and "Bad" Niles—How the Inundation is controlled—Sakkias, Shadoofs, and Taboots—Their Antiquity—Great Economy of Labour if they were replaced by Cheap Machinery—Methods of Cultivation still Rude — Cotton Culture—Capability of its Expansion — Cereals — Their Varieties and Yield—Non-Cereal Crops—Average Gross Value of Produce —With Improved Irrigation, Area of Cultivation may be Largely Increased.

ALTHOUGH anciently as famous for her manufactures as for her husbandry, in all modern time the latter alone has been the staple industry of Egypt. Her old skill in the productive arts, which once surpassed that of Sidon and Tyre, has long been forgotten, and in the almost complete absence of mineral resources, for more than three thousand years agriculture has been the chief support of her people and the main source of revenue to her Government. Before describing the methods and results of this great industry as at present carried on, it will be convenient to notice some of the principal conditions under which it is worked. These vary to some extent in different parts of the country, but they may be generally grouped under the four heads of—land tenure, rent, labour, and water-supply.

The first of these underwent but little change from the settlement made at the Arab conquest, which was

the ordinary Moslem division of the conquered territory into *kharadjieh* (tributary), *oushurieh* (tithe), and *wakf*, or mosque lands—till Mehemet Ali (in 1808) arbitrarily abolished all private title and declared the Government owner, not merely in fee but in usufruct, of almost the whole land of Egypt, giving instead a mere life-pension to the proprietors. This huge act of confiscation was, however, reversed by Saïd Pasha, who also abolished nearly all the monopolies established by his father, and the old tenures thereupon revived. The first of these is a sort of copyhold which pays the full *miri*, or land-tax, and the second a freehold that pays only the *oushur*, a much lighter quit-rent supposed to represent a tithe of its produce. The theory of Mohammedan law being that the fee-simple of the soil is in the sovereign, as personifying the State, the *kharadjieh* class is that portion of it whose usufruct only has been granted in consideration of a tribute, or rent, to private individuals, at first merely as crown tenants for life, but in course of time with the permitted right of sale and transmission to heirs. A condition of this tenure, however, is that five—formerly three—years' failure to pay the land-tax forfeits the tenancy, and the estate *ipso facto* lapses to the Government, which in such cases usually sells it to another occupier at the price of the arrears. This category includes about 3,500,000 of the whole 4,800,000 feddans of land now under cultivation in Egypt. The *oushurieh* class, on the other hand, consists of grants originally made in fee to favourites of the sovereign, either tax-free or subject only to a low tithe-rent, averaging about one-third of the *miri* paid on the other category. To this also now belong the sub-classes of *abadieh* and *aouassieh* lands, the former of which were waste lands granted on condition of culture, free

of taxes for six or eight years, after which they became chargeable with the usual imposts of their quality; and the latter, life estates given chiefly to Government functionaries, also tax-free, which formerly lapsed on the death of the grantee, but of late years have been allowed to pass to his heirs. Under the operation of the new Moukabala law, both these have been assimilated to the older lands held under this tenure, and now pay the same rate of tithe. All the great Mamlouk Beys owned vast tracts of these *aouassieh* lands, and after the destruction of the caste in 1811 Mehemet Ali bestowed more than 200,000 feddans of their confiscated estates on his own retainers. Altogether, the *oushur* only is now paid on about 125,000 feddans, or rather more than one-fourth of the whole cultivated area of the country.

The considerable aggregate of *wakf* property is held under a special tenure called *el-kizkah*, and is exempt from both land-tax and tithe. It consists of that portion of the land which, at the conquest, was assigned to the mosques for the support of religious worship, of schools, hospitals, and other charitable foundations, and which was subsequently increased by donations during life or bequests at death by pious Moslems, for a similar object. The conditions under which this class of property is held are these: As a house or farm falls in, it is sold, charged with a rent nearly equivalent to the *oushur*, and descends from the purchaser to his heirs, or may be sold by him during his lifetime; but in default of heirs, or on the ultimate failure of these in any subsequent generation, the property again lapses to the *wakf*, and is sold for its benefit as before. These pious gifts were originally made in trust to members of the Ulema or other high

religious functionaries, but already before Mehemet Ali's time, the trusts had been so abused that the old reformer cancelled the whole and vested the property in official administrators; but these proved no better than their predecessors, and have since been further superseded by a regular Ministry, by which what remains of it is now managed. The ruinous condition of most of the mosques in the capital and throughout the provinces shows to what an extent these endowments have suffered, and supplies a strong argument for their complete secularisation, as the only means of making the most of them in the interest both of Church and State. But of this reform there is no early prospect, and its effect therefore as regards either the mosques or the Treasury need not be discussed.

Both *kharadjieh* and *oushurieh* lands have been affected by the Moukabala law of 1871, in that, besides the extinction of half their respective taxes which will result from it in 1885, their owners will then receive what may be called parliamentary titles to their estates, confirming absolutely the advantages which modern usage has won from the old Moslem law.

The *rent-charges* on the soil thus held vary according to the class to which the land belongs, and again widely according to the quality of the land itself. Thus, while the land-tax on *kharadjieh* holdings average about 22s. per feddan, it ranges from 26s. 5d. in the province of Ghizeh to 14s. 10d. in Esneh; the difference being explained in part by the quality of the soil, but mainly by the greater facility of irrigation. Similarly the tithe charge on *oushurieh* lands, while averaging about 7s. per feddan, varies from 11s. 8d. in the mudirlik of Galioubieh to 2s. 10d. in that of Esneh. A further charge of about a dollar per feddan all round—

but varying in actual amount according as the land lies high or low—is made on both classes for water, to cover the cost of materials employed in making and maintaining the canals and dykes; but as no portion of this extra assessment goes to the Treasury, neither it nor the further tax in labour which, as will be presently mentioned, is levied for the same purpose by the district councils and engineers, can be fairly included in any estimate of rent-charge. Both are to be debited to irrigation, which, even where steam pumps are not employed, represents on an average more than half the whole cost of farming in Egypt. This distinction being observed, 22s. an acre for such land as the average of that in the Delta and Upper Nile Valley cannot be considered high, still less excessive. Labour and the cost of living are cheap, below the lowest European standard, and if only a *fixed rent* were levied, the land would well bear, and its occupiers would willingly pay, a still heavier tax. For the bane of the situation hitherto has been that the *miri*, although nominally fixed, has meant just as much as the collecting *saraffs* could squeeze out of the smaller cultivators, the large ones being generally able to protect themselves. Hence most of the oppressive iniquity which has so much discredited Egyptian fiscal administration. One great advantage this has, however, for both the tax-payer and the Treasury as compared with the system of tax-farming and collection in kind which obtains in Turkey; in Egypt neither the land-tax nor the tithe is farmed out, and both as a rule are paid in money, so that whatever may be the intermediate pilferings of *saraffs*, the Cairo Malieh mainly benefits by any excess of zeal in the collection, and the Fellahs are, at least, never plundered cent. per cent., nor their harvest ruined by the designed delay of the

oushurdjee. Only those who know how viciously the Turkish system works can estimate the advantage which the Egyptian peasant enjoys in this respect over his fellow-cultivator in Syria or Asia Minor.[1] Unlike, too, the fluctuations which attend the annual sales of the *dîme* in Stamboul, the Egyptian Minister of Finance can reckon beforehand—barring only the contingency of a bad Nile—within a few purses of what his land revenue for the year will produce. It is indeed nearly as steady a factor as the *impôt foncier* of France. Nor is this all; for while the so-called tithes of Turkey offer no room for increase, the difference between the *miri* and *oushur* in Egypt constitutes a reserve of taxation potentially worth nearly 1,000,000*l.* a year. Even the heavier of these taxes may, therefore, be regarded as moderate, and the lighter be written down as an almost nominal quit-rent which, remembering that vested rights here mean vested abuses, might be quite equitably trebled. When the Moukabala law shall, seven years hence, have reduced both land-tax and tithe by one-half, the Egyptian cultivator will in fact be relatively the most lightly taxed of his class in or out of Europe. If to this relief were added a settlement of the tax for a term of years, as has been done for our Indian ryots, the two measures together would form such a boon as agriculture in Egypt has not enjoyed since the Pharaohs.

Important, however, as are these anomalies of tenure and rent, they hardly affect Egyptian husbandry more than the third of its four chief inci-

[1] In Turkey the *dîme*—nominally a tenth, but in reality oftener an eighth, or even a fifth, of the gross produce—is collected in kind, under the vicious system of tax-farming, which, it is estimated, costs the peasantry 100 for every 50 received by the Porte.

dents—*labour*. For the present area of cultivation this may be said to be fairly sufficient, since manufacturing industry absorbs so few hands that fully nine-tenths of the whole working population are available for field labour. But if, as is quite feasible, more than 2,000,000 feddans[1] were added by increased irrigation, native labour, as at present miseconomised, would certainly not meet the enlarged demand. The cause and the remedy, however, for such a contingent deficiency are alike obvious. Although legally abolished, the pernicious system of *corvées* still survives for the benefit of the Government on public works, of the Daïra estates, and of some other large domains; so that, as often as the mudir requires a levy for whatever purpose, every male member of a family or worker on a private estate may, according to the caprice or the interests of the sheikh-el-beled, be drafted off on a *corvée* for weeks or even months at a time, to the neglect and consequent loss of the crops thus deprived of their labour. The conscription, too, although much less onerous now than during the reign of Mehemet Ali, still forms a tax on the labour resources of the country out of all proportion to its military needs, and the reduction of which to a figure befitting these would be an immense boon to its agricultural industry. At the same time, many thousands of men and cattle are almost as wastefully employed in working a system of irrigation which was probably

[1] According to the register made during the reign of Mehemet Ali, there were (and still are) in Upper Egypt 206,358, and in Lower Egypt, 891,641—or in all, 1,097,999—feddans of uncultivated land, besides which there are also in four of the lower provinces about 1,500,000 feddans of similar land not registered, the whole of which would become cultivable with extended irrigation.

old before the Pyramids were built. The complete abolition therefore of these drains of forced labour, and the substitution of some cheap pumping machinery for the *sakkia* and the *shadoof*, would set free thew and sinew enough to till every acre of Egyptian soil that can be further reclaimed to the plough. As it is, the Arab fellahs furnish nearly the whole labour-supply of the country, the Copts—except in some villages of Upper Egypt—being almost entirely engaged in trade, in small handicrafts, and in the Government offices. Of these fellaheen, the lowest and much the most numerous class of actual labourers for hire, called *mourabain*, own no land themselves, but work either for daily pay or for a share—usually the fourth—of the produce of a plot of ground belonging to some cultivator, on whose land they have lived from father to son for generations, and who pays the Government taxes. The wages of these people vary in different districts, but when paid in cash average about 6d. a day.

Next come the small proprietors who own from fifty to several hundred feddans, which they cultivate with the aid of the *mourabain* and of their own families, like the small tenant-farmers of Europe. The condition of this section of the population has much improved during the last twenty years, profiting as it has done from the enhanced price and increased production of nearly every staple crop of the country. The estates of the large owners, the wealthier Pashas and Beys, are similarly worked on this mixed system of wage-payment, part in money and part in produce, or by sub-letting small plots of ground at a fixed rental of so many days' field-labour per feddan. In view of the fact that only

extended irrigation is needed to greatly increase the area now under tillage, the idea of importing Coolies has been mooted, but the suggestion has not found favour with the Khedive,—for the probable reason that he well knows there are fellahs enough for every agricultural want of the country, if only the heavy tax of *corvées* were put an end to, if the conscription were reduced by at least one-half, and if hand-labour in irrigation were replaced by cheap wind or steam-driven machinery. Perforce these reforms will come, and there is therefore no reason to fear that the development of Egyptian husbandry will be ultimately checked for lack of hands.

But even more important than land tenure, rent, or labour is the vital condition of *water-supply*, on which not merely the profit but the very life of Egyptian husbandry depends. Of this the one sole source is the Nile, whose yearly flood, caught and circulated through a thousand channels, fertilises every tilled acre of Egyptian soil between the tropics and the Mediterranean. The annual rise of the river is almost tidal in its periodicity, commencing generally in the last days of June, and attaining its greatest height in the third or fourth week of September, when the gradual fall begins which continues till the summer solstice again comes round.[1] This annual phenomenon, it need hardly now

[1] The rise and fall of the river are registered by the Nilometer at the southern end of the little island of Rhoda, opposite Old Cairo. This consists of a square well communicating at bottom with the river, in the centre of which is a graduated pillar divided into sixteen cubits (of two and a half inches each), equal to twenty-four Cairene cubits of fourteen and a quarter inches, and sub-divided into twenty-four digits each. Since this famous measure was erected (A.D. 861), the bed of the river has considerably risen, and the flood at its highest now tops the column by nearly one and two-third cubits. From soon after the commencement of the inundation till it has attained its greatest height, the gradual increase as registered by the

be said, is attributable to the equatorial rains, occasional variations in the commencement and duration of which are followed by corresponding irregularities in the rise and fall of the great river; but the dates mentioned are those about which, over a long average of years, these latter generally occur. As soon as the first signs of the commencing swell are noted at Khartoum, the news is flashed down to Cairo, and thence preparations are at once made to protect the embankments which now fence in the stream, wherever needed, along its whole course from Assouan to the sea. How the inundation is tapped and its water drawn off—first into the great reservoirs of Upper Egypt and then into the various canals—is explained elsewhere. Enough therefore to say here, that the rise varies from a minimum of about nineteen feet, to a maximum of twenty-nine feet, the former height making a low or "bad" Nile, and the latter a dangerously high one, as most of the arable land on either side lies much below this level.[1] The rise of 1874 attained this perilous elevation, and but for the great energy of the authorities, personally directed on the spot by the Khedive, the banks below Cairo would have given way, and the whole of the Delta have been ruinously flooded. From twenty-three feet to twenty-four feet makes a "good" Nile, and this has been the average rise of seven out of the past ten years. As already mentioned, this care of the river-banks and of the canals and dykes forms a special labour-tax, which is

pillar is proclaimed daily by special criers throughout Cairo. The ceremony of the *khaleeg*, or cutting of the great canal which here taps the river, takes place when the rise has attained sixteen cubits of the Nilometer, and forms one of the chief Egyptian festivals of the year.

[1] The crops of 1868 suffered heavily from an insufficiency of water, while those of 1869 and 1870 were correspondingly injured by an excess of it, through a too high Nile in both years.

assessed by local councils partly chosen by the fellahs themselves, and partly nominated by the mudir of the province. To these are attached Government engineers, with whose aid estimates and plans of the work to be done are periodically prepared and sent for approval to the Minister of Finance, who either rejects or lays them before the Privy Council and the Khedive. If thus finally sanctioned, they are remitted to the mudir, and the village sheikhs are ordered to detail the necessary hands for the work, which is then done entirely by *corvée* labour. In the distribution of this forced work by the sheikh-el-beled there is occasionally much injustice, although the aggrieved peasant has the right of appeal to the primary communal medjlis, and thence again to the higher provincial court. But this privilege is of little practical value, and as the sheikh allots the burden so it is generally borne. Although the chief water-supply of the country is derived from the reservoirs and canals thus made and maintained, it is importantly supplemented by an auxiliary system which, as before mentioned, absorbs a large amount of human and other animal labour. This consists of three very primitive machines called the *sakkia*, or Persian water-wheel, the *shadoof*, and (less commonly used) the *taboot*. The first of these is composed of a vertical wheel which raises the water out of a well—of which there are vast numbers all over the country, fed by infiltration from the Nile—into a continuous chain of earthen pots fixed to its tire, like the buckets of a dredging machine; of a smaller cog-wheel or pinion on the same axis, and of a large horizontal wheel, also cogged, which, driven by one or two oxen, according to the size of the machine, works into the pinion and sets the whole in motion. The great cattle-plague of 1864, which swept away more

than half the oxen and buffaloes of Egypt, compelled the abandonment of many of these machines for want of animals to work them. The *shadoof*, or pole-and-bucket—familar to all voyagers on the Nile—is a still ruder contrivance, consisting of a couple of posts or mud pillars about five feet high and three feet apart, supporting a cross beam, on the centre of which is poised a long pole having at its inland end a heavy counter-poising stone or ball of dried clay, and at the other, suspended to a rope or a couple of long palm sticks, a wicker basket lined with goat-skin, with which the water is swung up seven or eight feet into a trough to receive it. Three, four, five, or even six of these machines, in ascending series, are sometimes needed to raise the required water where the ground to be irrigated is high. The *taboot* is a variation of the *sakkia* chiefly used in the Delta, where it is necessary to raise the water only a few feet. All three of these machines are very ancient, but especially the *shadoof*, as is shown by its frequent appearance in the tomb sculptures at Thebes and elsewhere.[1] One *sakkia*, it is estimated, does the work of five *shadoofs*, but this advantage is largely balanced by the greater original and working cost of the former machine. Besides these antique contrivances, nearly five hundred centrifugal pumps driven by portable steam engines are also at work throughout the country during low Nile, for the greater part on the Daïra and other large estates. The remainder are jobbed out by

[1] Wilkinson's *Ancient Egyptians*, ii., p. 4—5. There is also a variation of the *shadoof* called *chutweh*, which is worked by two men with four cords, but the more common form of the machine is that described above. The latest official return reports the total number of *sakkias* at 30,084, that of *shadoofs* at 70,058, of *taboots* at 6,926, and of steam pumps at 476, engaging the labour of more than 60,000 animals and 150,000 men for, on an average, about 180 days in the year.

private owners, who supply the pump, fuel, and a man to work it at rates varying from 3*l.* to 6*l.* per feddan, according to the quantity of water required, and the level of the ground to which it has to be thrown. That such rates can be paid by any of the smaller cultivators says much for the profits of Egyptian farming: but they are practically prohibitory for the majority, who therefore keep to the hardly less costly water-wheel and pole-and-bucket. The only efficient substitute for these old-world contrivances would seem to be some simple form of wind-driven machine, costing nothing for fuel and next to nothing for superintending labour; but against even this the conservatism of the fellah has hitherto been proof.

The cultivation carried on under these conditions varies considerably with the different districts, but everywhere, except on the Daïra farms and on some of those belonging to the richer Pashas, its methods are still as rude as when Joseph was *moufettish*. The ploughs, hoes, clod-crushing, threshing, winnowing, and other implements may, in fact, all be found in sculptured or painted counterpart on scores of tomb and temple walls anywhere between Beni-hassan and Edfou. Vainly have Reading and Ipswich tried to introduce into general use the improved tools of modern husbandry: the Khedive's and some of the larger private estates have adopted their steam ploughs, patent reaping-machines, and other novelties, but the peasant farmer will have none of them at any price Messrs. Howard or Ransome have yet been able to quote. In fact, as has been well said, "the earth is tickled with a hoe and laughs with a harvest," for over three-fourths of the country the soil is merely scratched with the

crooked stick which here, as generally throughout the East, does duty as a plough.

Of the produce raised under these implemental disadvantages, *Cotton*, though of less aggregate value than the cereals, ranks first in importance. Although microscopic experiments with mummy-cloths have proved that the *byssos* of Herodotus was flax and not cotton, as was long supposed, there is abundant evidence that the latter plant was grown and used by the ancient Egyptians. It had, however, passed out of cultivation long before the modern era, and when, in 1821, a Frenchman found a specimen of the long-staple kind growing wild in the garden of a Cairene Bey, Mehemet Ali perceived the value of the discovery, and at once ordered as much of the seed as could be collected to be planted on one of his own farms. The result was a great success, and stimulated by the high price obtained for the new fibre in the European markets, the Viceroy—who then held monopolies of this and nearly every other produce of the country—promoted its extensive cultivation throughout Lower Egypt, the soil and climate of which were found to be admirably adapted to its growth. In 1838, Sea Island seed was introduced, but though the yield from it was at first excellent, the use of native (instead of freshly-imported foreign) seed in time affected both the quality and quantity of the crop; and as, besides, the cultivation of this variety required much greater care and labour than that of the native plant, its growth has been almost abandoned in favour of the latter, which has, on the whole, been found to pay better. This Sea Island growth is in commerce called "Gallini," and the old native plant "Mako," after the name of the Bey in whose garden it was discovered. The cultivation of the

plant—of whichever variety—differs slightly according as the ground sown is *balieh*,—*i.e.*, watered solely by annual inundation, or *miscoweh*, which is not thus fully irrigated, but requires to be artificially watered several times before and after the seed-sowing. In Lower Egypt, where the land is fatter and stronger than above Cairo, one ploughing generally suffices before seed-time, but in the Upper Valley two at least are necessary—deep if the soil be light, but shallower where it is heavy. Small patches of ground are hoed where the cultivator cannot afford the cattle-power required for the plough. The ground being next levelled with the hoe or a rude kind of harrow, furrows are made about two feet apart, in which, at intervals of some three feet, holes are drilled three or four inches deep. Into each of these the sower drops half a dozen seeds, which he covers in with earth and waters, or not, and the operation is complete. The *balieh* lands are thus sown in March, and the *miscoweh* in April. Near the towns vegetables are generally planted between the furrows, to make the most of the ground: where this is not done, the plants are thinned and earthed up by ploughing between the ridges. The frequent artificial watering needed by the *miscoweh* lands is more than repaid by the great superiority of their crop, in both quantity and quality, over that of the *balieh*; for while the latter yields only from two to three cantars (of 98 lbs.), the *miscoweh* give from four to six, and on the best soil even eight cantars per feddan. The pods begin to ripen in September, and the first picking takes place in October, the second in November or early in December, and the third in January or February, when the cotton-trees, as they are called, are usually pulled up—the plant being now an annual in Egypt, reproduced from fresh seed—to

make way for another crop, unless where the ground had been previously sown with beans or other pulse, in which case they are left to protect these latter from the occasional storms occurring in Lower Egypt during January and February. In some districts the stalks are not pulled up, but are cut close after the last gathering, and the ground is then sown with clover. In this way, besides this latter crop for feeding purposes, a second growth of cotton is obtained; but the quantity is much less, and the staple shorter than in the first. The numerous ginning factories with which private enterprise has, within the past few years, everywhere superseded the old rude *dulabs*, next separate the seed from the cotton, which is then sorted and packed into bags, or hydraulically pressed into bales, and carried rapidly off to Alexandria by one or other of the railways that now reticulate the country from Assiout to the sea. Within the past two or three years, complaint has been made of a deterioration in the quality of Egyptian cotton, and the result of an inquiry into its causes has shown that it is attributable chiefly to the careless mixture of different seeds in the ginning mills, but in part also to the exhaustion of the land from the too frequent repetition of this crop, and the want of recuperative nourishment by manure.[1] Guano is now used by many

[1] Almost the only manures used in Egypt for agricultural purposes are pigeon's dung, cotton refuse, blood and the other *ejecta* of the slaughter-houses, and rotten fish. The first of these is produced in large quantities all over the country, by myriads of the half-domesticated house-pigeon and great flocks of the blue-rock wild bird, which are encouraged to roost in cots specially built for them in almost every village. Their guano is carefully collected and sold at a price that practically confines its use to garden purposes, a portion of the Daïra sugar estates being almost the only place where it is employed as a field-dressing. About 260,000 tons of this manure are annually collected; the quantity used per feddan is about 9 cwt., containing thirty-five parts of azote and the same pro-

of the larger cultivators, but the smaller ones can neither afford thus to renew their phosphates nor to follow a wiser rotation of crops. Amongst them, therefore, cotton comes round every second year instead of every third, as on the larger estates, and in spite of the annual gift of virgin soil from the Nile, the land becomes more and more impoverished. The action taken by the Government, however, to remedy both these causes of deterioration, has already effected a marked recovery in the quality of the staple, which may be expected to still further improve as intelligent care of the seed and its culture is continued. The latest available statistics, for 1875, return 871,847 feddans as having been under cotton crop in that year, producing 2,615,541 quintals (110 lbs. each) of ginned staple, 1,954,555 ardebs (of 5 bushels) of seed, and 3,749,446 loads of cotton sticks, of a total value of 12,267,487*l.* Of this 352,998 bales of about $5\frac{1}{2}$ quintals each were exported from Alexandria, the remainder, barring a small quantity shipped for the Hedjaz, being kept for home consumption. The produce of 1874 was more than 400,000 bales in excess of this yield, and that of last year—from an area of nearly 1,000,000 feddans, and favoured by an unusually fine season, and an

portion of phosphate of lime. The other three kinds are totally insufficient for even the principal crops, and as there is a limit to the fertilising properties even of Nile mud, the result is the frequent exhaustion of the poorer cultivators' lands mentioned in the text. Other animal dung is gathered by the children, and, when mixed with chopped straw and formed into flat cakes dried in the sun, becomes the fuel called *gilleh*, about 100,000 tons of which are made annually. These cakes are preferred as fuel to cotton sticks or wood, as, when once well lighted they retain their heat for a long time, and do not give off the smoke and pyroligneous acid which, when wood is burned, taint the bread in the rude earthen ovens used for the family bakings. The land is thus deprived of the largest class of its proper animal manure, and in the absence of artificial substitutes suffers as has been stated.

abundant but not excessive Nile—was much larger still. A measure of the increase in the growth of this staple during the present reign may be found in the fact that since the death of Saïd Pasha the quantity exported has augmented 257 per cent. as compared with the shipments of the previous thirteen years. Nor is this at all the full limit to which its culture may be easily and profitably extended. Competent local opinion affirms that without trenching on the cultivation of cereals—of which cotton only interferes with *dhoura*, as suiting the same kind of ground—1,000,000 bales might be grown annually, as only increased means of irrigation are needed to fertilise many thousand additional feddans of land admirably adapted to this crop, but which without water are now as sterile as the Sahara. As canals, unlike pioneer railways, are immediately reproductive, it is probable that for the next few years of compelled economy the chief outlay on public works will be in this direction; and, if so, before the Moukabala expires the further expansion of cotton culture alone may go far to recoup its loss to the Treasury.[1]

[1] Since the above was written, a new cotton plant has been introduced which promises to revolutionise the whole culture of this staple in Egypt. It was discovered in 1873, by a Copt, near Birket-el-Sab, a station on the Cairo railway in the upper part of the Delta, who noticed in a cotton field a plant that differed greatly in appearance from the rest. He gathered its pods, in all about seventy, and planted the seed secretly in an isolated plot of ground, where the yield even the first year was more than treble that of the common plant. The result of the second and third years' sowing was even greater, and the discovery could no longer be concealed. The new plant, which is very thickly studded with pods, grows to a height of nearly ten feet, has no branches and only very few leaves, which permits its being planted much more closely than the common one. To distinguish it from the latter it has received the name of *bamia* cotton, from its likeness to the vegetable of that name. Between 300 and 400 ardebs (270 lbs. each) of the new seed are now available for sowing, and so high are the expectations from it that a few weeks ago it sold readily in the market at from 25*l.* to 30*l.* an ardeb,

Although cereal produce has not increased in the same high ratio as cotton, its augmentation within the past twenty, and still more the past forty years, has also been very great. Thus, while the eight or nine crops falling within this category only produced 3,585,000 ardebs in 1834,[1] their gross yield, exclusive of sugar-cane, amounted to 25,670,000 ardebs in 1875. Of this large total, *Wheat*, which in 1834 figured for only 950,000 ardebs, had two years ago developed to 6,662,632 ardebs-worth—at 120 piastres each—E.£7,995,158. Of this, however, less than 400,000 ardebs were exported from Alexandria, chiefly to England and France; home consumption and a small exportation to Arabia accounting for the remainder. The culture of this crop, like that of cotton, differs according to the districts in which it is grown. In Upper Egypt, where the heat is greater, its seed-time and harvest are both a month earlier than in the lower provinces. The subsidence of the inundation at the end of October—when what is called the *shitawee*, or winter season, begins—is there immediately followed, while the soil is still miry, by a preparatory ploughing, and on the half-dried earth, thus roughly turned up, the seed is then sown broadcast without further labour. The harvesting takes place in April, when the stocks are cut, carried on ass or camel back to the village threshing-floor, and there beaten out,

as against 1*l.* for the old seed. As it multiplies at the rate of sixty to one, the next crop should yield above 20,000 ardebs of seed, or nearly enough to sow the whole cotton-growing land of the country four times over. The quality of the new staple being quite equal to that of the old plant, the immediate effect would be to at least triple the yield (and consequent money value) of this great crop, without at all extending the area of cultivation. The result of the present year's experiment will, therefore, be awaited with curious interest.

[1] Dr. Bowring's "Report" (1840), p. 17.

in the upper districts of the Saïd by a yoke of oxen driven round the heap, or in the Middle and Lower provinces by the *nóreg*, a rude wooden frame moving on thin iron wheels, which, drawn in a circle by a couple of oxen, separates the grain from the ear and at the same time cuts the straw for fodder. This last is then tossed into the air with two-pronged wooden forks, and the operation of winnowing—as rudely simple as all that precedes—is complete. In Lower Egypt, two ploughings are given, one before and the other shortly after the sowing, which here takes place late in November. The second ploughing serves instead of a harrowing, and improves the crop. Where this last fails, through the action of worm or from any other cause, a third ploughing and second sowing are given, or the land is used for maize. In both sections of the country a feddan receives about $1\frac{1}{2}$ of an ardeb of seed, and yields from 4 to 7, or in the best land even 8 ardebs of grain, which is, it may be added, all bearded.

The next great staple crop of Egypt is that of *Dhoura*, or maize, which forms the chief food of the fellaheen. Of this there are two varieties—the *dhoura sèfi*, or summer maize, and the *dhoura Nili*, more properly millet, which is cultivated at high Nile: they are also respectively called *beladi* (native) and *shâmy*[1] (foreign), the latter being probably of Syrian origin. This last is a large yellowish grain, and the former much whiter and finer in its flour. The *beladi* is sown early in April, generally on ground that has given a crop of clover. After the land has been well weeded, and the weeds

[1] Called also *dhoura byood*. In the case of this variety of the grain, or in others in which unusual care is required in the tillage of the land, a clod-crushing machine, called *khonfud*, is sometimes used instead of the hoe.

burned and scattered over it, it receives one ploughing. The sowing is then done by drilling two or three pickles of the grain into holes about three inches deep, which are then covered in and the ground divided into small squares of four or five feet, enclosed by raised borders round which the water is carried in narrow gutters. As each square is sufficiently moistened, the water is run off round another till the irrigation of the whole is complete. The frequent watering required being altogether artificial, where the land is distant from the Nile, and so impracticable for *sakkias* or *shadoofs*, the precious fluid has to be carried in skins, in which case it is poured only over the holes containing the seed, with the result of an inferior yield. About three weeks after the sowing, a top-dressing of nitrous earth is given to the ground by some cultivators, to hasten the crop. The harvest takes place about the middle of July, when, after the ears have been cut off and laid aside to dry, the stalks—eight or ten feet high—are pulled up, and piled away to be used as fuel in lime-kilns, to cover in garden alleys, roof village huts, or with the addition of canal mud to build huts altogether. Much of this *beladi* variety is eaten roasted, and in this form is a very common article of diet. The *dhoura shâmy* quickly follows during the early rising of the Nile, and, except that it is less careful, its culture closely resembles that of the spring crop. The produce of the two, from 1,884,414 feddans of land, amounted in 1875 to 10,502,715 ardebs, worth E.£8,193,000, or with E.£325,107 realised for the straw, a gross total of E.£8,427,952. *Dhoura* was already an old Egyptian staple in the days of Herodotus, and the method of its culture is still such as he witnessed nearly eighty generations ago.

In acreage and value of produce *Beans* ranked next, occupying 1,220,073 feddans and yielding 4,575,273 ardebs, which, at the current value of 100 piastres per ardeb, were worth E.£4,575,273. This crop is grown in nearly all parts of the country, and forms a common article of food for both man and beast. It is sown in October or early in November, after one ploughing, and the seed, which is thrown broadcast, is then covered in with a second. It is cut in March or the beginning of April, when the beans are shelled by the *nòreg*, and the bruised stalks, as in the case of wheat-straw, are reserved for fodder.

In the same year (1875) *Barley* was grown on 520,617 feddans, with a produce of 3,103,085 ardebs, worth E.£2,394,000. This also is a winter crop, sown in November and harvested early in May, and its cultivation is in the main similar to that of wheat. Soon after the subsidence of the inundation, the ground receives a light ploughing, and is then roughly levelled either with a rake or by cattle being driven over it, instead of harrowing. One ardeb of seed is sown to a feddan, with an ultimate yield—varying according to the quality of the land—of from 4 to 10 or even 12 ardebs of grain. Barley, like dhoura, is pulled up by the roots, and not cut like wheat.

Rice, which is chiefly grown in the lower Delta, is sown in April, and harvested in October or early in November. The ground to be occupied by this crop is first covered for several days with water, and after having been twiced ploughed, is left for a while to dry. It is then again ploughed and submerged, and when thoroughly saturated the surface is smoothed and the seed—having been previously soaked and allowed to germinate—is thrown on broadcast. Round Damietta

about one-tenth of a daribé of seed is given per feddan, but near Rosetta a sixth is used, the produce varying from 2 to 5 daribés, or from 4 to 6 under the most favourable circumstances. Three days after sowing, the ground is again flooded for some days and then drained, and this process is frequently repeated till the maturity of the crop, when the stalks are cut and the grain crushed out by the *nóreg*, like wheat and barley. It is then cleaned from the husks by being passed twice through a mill, receiving during the second passage a slight mixture of salt. The total produce of this crop, the surplus of which is chiefly exported to Turkey, was 98,521 ardebs, valued at E.£738,908.

These five crops complete what may be called the great cereal produce of the country, the minor ones—which are rather leguminous herbs than cereals—being lentils, lupins, chick-peas, and a seed with a somewhat bitter taste called *helbé*, the flour of which is mixed with dhoura by the fellahs. The first of these is sown in the middle or end of November, and ripens in from 100 to 110 days, when the stocks are pulled up and shelled with the *nóreg*, like beans. The year before last it occupied 89,180 feddans, and produced 312,119 ardebs, worth E.£374,543. Lupins, which are sown and harvested about the same time as lentils, yielded, from 26,624 feddans, 133,121 ardebs, officially valued at E.£133,121. Chick-peas, also sown in November, ripen in 90 or 100 days, and from 27,561 feddans produced 110,245 ardebs, worth E.£165,368. Besides these, many other garden-plants are grown in great abundance, of which only onions, garlic, cucumbers, lettuce, beet-root, water-melons, bámias, and potatoes need be specially mentioned. These last, however, are not much grown, as the rich alluvial soil is not well

adapted to them, and most of the inconsiderable consumption of the root is supplied by imports from Malta and Sicily. Finally, it may be remarked that oats are not grown at all in Egypt.

Among the non-cereal crops, *Clover* (Arab. *berseem*) ranks next after cotton. In 1875 its total yield was valued at E.£3,043,465, of which 210,273 ardebs of seed, at 150 piastres each, produced E.£315,410; green-stuff on 520,322 feddans of pasture, at 300 piastres in the Delta and 250 piastres in Upper Egypt, E.£160,390; and 8,451,102 loads of dry fodder at 15 piastres each, E.£1,266,665. Three and sometimes four crops of this valuable grass are grown within the year, separately or mixed with other crops—the first sown early in October and ripening in a couple of months; the second fifty or sixty days later; the third is left for seed; and the fourth, which is raised by irrigation, produces no seed, but, like the first two, is eaten on the ground. All working animals in Egypt require a course of *berseem*-feeding every year, their food during the rest of the twelvemonth being dry, mostly beans and chopped straw. This pasturage season begins in November and lasts till March, during which the animals are grazed four times over the same field, which also receives as many artificial waterings. Clover is, in fact, to the Egyptian horse, buffalo, donkey, and cow what dhoura is to their human co-labourers the fellaheen.

The cultivation of *Sugar-cane* on an extended scale is a comparatively recent addition to the husbandry of Egypt, and promises, if developed in the ratio of the past dozen years, to become one of its chief sources of agricultural wealth. Forty years ago, only 252 feddans of land were thus occupied; in 1875 cane was grown on 74,855 feddans. Of this large area, 47,696 feddans

belonged to the Daïra estates in Upper Egypt, the remainder being chiefly cultivated by private owners there and in the Delta for sale of the cane to be eaten fresh. The value of the whole crop for the year was estimated at E.£1,659,023, of which E.£871,833 was produced by 927,471 quintals of sugar (at 90 piastres each) and 371,100 quintals (at 10 piastres) of treacle made in the Khedive's sugar-factories, noticed elsewhere. The profits of this crop to his Highness of course depend primarily on the fluctuations of the sugar market, and to some extent on the accident of a good or bad Nile; although these last affect the Daïra estates less than private land, since in practice they enjoy a first charge on the canals in their neighbourhood, and obtain water, want who else may. The plantation takes place in March, when the cane is laid in furrows about four feet apart, and bearing north and south, so that the prevailing wind may enfilade the young plants. The crop ripens about Christmas, and when cut is at once conveyed to the mills, as any delay in crushing the cane sets up a chemical action that injures the juice, and so damages the sugar. The produce varies from 12 to 20 or even 25 cantars per feddan, according to the quality of the soil, and especially to the abundance of water and care in the cultivation; but while on these estates there need, as a rule, be no want of water, the cultivation is notoriously inferior, and the average yield is therefore not much beyond 12 cantars of refined and 6 of brown sugar per feddan. Even this, however, would yield an excellent commercial return, if the original outlay on the factories had not been excessive, and if their working were more carefully supervised. But they have to contend against the dead-weight of an enormous first cost, and of a

management which is, to say the least, much less economical than if the property were worked for private owners. In the hands of a European company, these great estates and factories together would almost certainly yield large profits on a moderate purchase-capital or rent; as it is, it may be doubted if, with every advantage of privileged labour and water, they now pay 7 per cent. on the cost of the mills alone. Local opinion, nevertheless, is clear that, under sounder economical conditions, sugar-culture might be made one of the most prosperous industries of the country.

At a considerable remove from this great crop, *Flax* forms another important product of the Egyptian farmer. This very ancient plant is cultivated in two ways. In the Saïd, soon after the subsidence of the river in early November, the seed is thrown broadcast on the half-dry ground, which receives no labour whatever, before or after, till the plant is pulled in the following March: in Middle and Lower Egypt, on the contrary, the land is first ploughed and roughly smoothed, it is next divided into small spaces on which the seed is cast, and is then watered. As soon as the plant has sprouted it receives, like the commoner crop of dhoura, a top-dressing of nitrous soil, and is again frequently watered till ripe for pulling. Its subsequent treatment is then nearly identical in both sections of the country, and is closely similar to the methods of preparation—steeping, drying, beetling, and scutching—still followed in those parts of Ireland where hand-work has not yet been superseded by machinery.

In 1875 this crop, grown on 23,467 feddans of land, produced 113,577 quintals of the fibre, valued (at 200 piastres per quintal) at E.£227,154., and 82,075 ardebs of linseed, worth E.£123,111. *Hemp*, a sister crop, which

is grown chiefly for its oil and its intoxicating preparation called *hashcesh*, is sown and ripens at the same time as flax, to which its subsequent treatment is also in the main similar.

In money-value *Tobacco* ranks next among the minor crops remaining to be named. A considerable quantity of it is grown in Middle Egypt, but the quality is inferior, and it is used only for the consumption of the army and the fellaheen, Turkey and Syria supplying most of that smoked by the wealthier classes. It pays however a heavy excise duty, and its cultivation is therefore strictly watched by the Treasury. The produce of 1875 amounted to 27,171 quintals, valued (at 500 piastres each) at E.£135,855. *Toombak*, a species of Persian tobacco used in the narghileh, was also grown, to the extent of 4,400 quintals, valued at E.£22,000. *Sesame*, which is principally cultivated for its oil, produced 22,683 ardebs, worth E.£56,706*l*. It is a summer crop, sown a week or ten days after the *dhoura byood*, and ripens in about three months and a half. *Henna*, valued for its dye, yielded 28,473 quintals, worth (at 200 piastres each) E.£56,946. *Indigo*, grown chiefly in Upper Egypt and the Fayoum, produced 4,425 quintals, valued at E.£6,637. This plant gives three years' crops from one sowing, in the first of which it yields four cuttings, and in the second and third years three each. Sown in April, the first crop ripens in seventy days, the second in forty, the third in thirty, and the fourth in twenty-five. The ground is then left without water throughout the winter, but is well irrigated in March, after which a first second-year's crop is grown in forty days, a second in thirty, and a third also in thirty, and the same in the following year, when after a similar interval of rest the

seed must be renewed. Of the ten cuttings thus obtained the first two or three are the best. The subsequent extraction of the dye is very simple: the leaves of the plant are thrown into earthen vessels, which are buried in pits and filled with water, heat is then applied, and the liquid boiled till the indigo thickens, when it is pressed into shape and dried.

Safflower, or the bastard saffron (Arab. *cortum*, or *záferán*), the flowers of which are used for dyeing, and oil extracted from its seeds, is sown in the middle of November, and ripens in five months. The land receives no preparation before the sowing, but is raked once afterwards, and the grain, when well dried, is threshed out with a rude sort of flail. In 1875 an area of 1,871 feddans was sown with this crop, and the produce valued at E.£11,858.

Opium (Arab. *aboonom* "father of sleep"), though not reported[1] in the official return from which the statements of quantity and value above mentioned are mainly taken, completes the tale of agricultural products that need be mentioned. It is sown in November in a strong soil in furrows, and in a couple of months attains a height of four feet, when the stalk is covered with long oval leaves, and the fruit, which is greenish, resembles a small orange. As it approaches maturity in April, incisions are made every morning in the fruit, from which a white liquor distils, which is collected in a vessel: this soon becomes black and thickish, and being then rolled into balls, covered with washed leaves of the plant, is ready for the market. The best and most abundant crop is grown on inundated ground: the

[1] Because, probably, the cultivation is nominally prohibited, though openly connived at by the local authorities.

seeds are crushed for lamp-oil, and the stalks used for fuel.

The *Rose* crop of the Fayoum, though no longer of its former importance, is still a feature in the agriculture of that province. The annual culture begins in May, when the soil, after having been twice ploughed, is divided into square patches, and slips of the flower are planted in holes two or three feet apart. These crops are then covered in, and the earth kept constantly most, till the young shrubs begin to appear above ground, when the irrigation is reduced, and the trees gradually attain their average height of about two and a half feet. At the end of December, the shoots are cut at the surface of the ground, and irrigation is resumed for thirty or forty days, when the budding and the full blowing of the flower takes place. The young roses are then gathered early every morning, with the dew fresh upon them, and are placed in an alembic, where distillation ensues for six hours. The water is then drawn off, and being slightly yellowed with other water in which roses have been infused, is ready for sale. The consumption and consequent production of the article have greatly fallen off within late years, owing to the old custom of sprinkling guests — for which it was chiefly used — having gone largely out of fashion. About 50,000 ounces is now said to be the quantity annually distilled, nearly the whole of which goes to Cairo and the Levant. No otto of roses is here manufactured, although, from the suitableness of its soil and climate for the growth of this flower on the largest scale, the Fayoum might, in respect of the more precious extract, compete favourably with the rose-farms of Adrianople.

The crops thus briefly catalogued have been noticed in the order of their importance: it may be convenient to re-group them in that of the three seasons into which the agricultural year in Egypt is divided. These are (1) the so-called winter (*shitawee*) season, which follows the subsidence of the inundation in the beginning of November, and during which the lands that have been directly watered by the flood are sown with wheat, barley lentils, rice, beans, clover, lupins, flax, chick-peas, &c., as above detailed; (2) the summer season (*sèfi*), beginning soon after the spring equinox, when the Nile is at its lowest, during which cotton, millet (*dhoura sèfi*), and indigo are grown; and (3) the high Nile (*demeereh*) season, commencing soon after the summer solstice, when the chief crop is a second growth of millet or maize (*dhoura shâmy*)—making a third harvest in the year.[1]

In addition to these various field-crops, nearly 1,000,000*l.* worth of esculent vegetables, fruit, and other garden-stuff was registered during the year, while more than 4,500,000 date-trees (which are the subject of special taxation) completed the vegetable produce of the twelvemonth, with a gross yield of E.£1,583,000, making, with all that precedes, an agricultural total for the year of E.£45,382,332. With this the official return groups a further total of E.£6,540,783, for horses, donkeys, cows, buffaloes, camels, sheep, wool, fowl, eggs, butter, cheese, honey, salt, fish, quarry-stones, wood, and other quasi-farm produce, raising the entire earnings from the land and its belongings

[1] In the rotation of crops now most commonly practised, wheat is generally followed by barley, dhoura, beans, or lentils; clover by wheat; safflower by tobacco, lupins, or chick-peas; sugar-cane by dhoura; the latter by flax; and that again by indigo, which, as stated in the text, lasts for three years.

for the year to E.£51,923,115—a sum which, it might be fairly argued, goes far to justify the whole of the present direct taxation of the country. Nor is this at all the limit of its agricultural wealth. As has been previously mentioned, extended irrigation would not only largely augment the produce from the area already under crop, but would add to it above a million feddans of new soil, reclaimed from the desert, and requiring only moderate working capital and a better use of the existing labour-supply to yield as large return as any equal acreage now under cultivation. It is, assuredly, rather in her agriculture than in any possible manufacturing competition with Europe, that the true elements of the national wealth and prosperity of Egypt are to be found.

CHAPTER X.

PUBLIC INSTRUCTION.

Foundations of Present System laid by the Caliphs—Decadence under the Mamlouks—Revival under Mehemet Ali—His Military Schools—His Neglect of Education after the Peace—Further Decline under Abbas Pasha—Greater Liberality of Said—Revival under the Khedive—Three Systems now at Work—The State Schools—Girls' Schools, their Great Success—The Blind and Normal Schools—Municipal Civil Schools—Mosque Colleges—The Azhar—Arab Primary Schools—Native Non-Moslem Schools—Foreign Missionary Schools—Aggregate of the whole—Educational Level of Egypt relatively to Europe.

THE foundations of the present system of public instruction in Egypt were laid by the Caliphs, who first at Alexandria and afterwards at Cairo—as in Syria, at Baghdad, and in Spain—fostered learning and the arts with a munificence unequalled by either their Greek or Roman predecessors, and which stands in still more marked historic contrast with the neglect of both by their Tartar successors of Stamboul. Besides themselves founding many great libraries and colleges for the higher education, they encouraged the endowment of secondary and primary schools by private liberality, till every town and almost every village of the country had its *medresseh* or *kouttabb*. In this way originated the system of *wakfs* (pious foundations) which threw the ægis of religious protection over all property devoted to these and other charitable uses, and secured it against the spoliation from which in after times no mere private estate was safe in either Egypt or Turkey. Thus it was that while Europe was sunk in the intellectual

gloom of the Middle Ages, Egypt again became the home of science and philosophy, which flourished there as, after the decline of the Baghdad Caliphate, they flourished nowhere else but in the Moorish colleges of Spain. With the fall of the Fatimites this splendid patronage ceased, and thence on through the turbulent Mamlouk dynasties that followed, and the still more anarchic times which succeeded the Turkish conquest, Egyptian learning steadily declined till the *savants* who accompanied Bonaparte's expedition found even in Cairo hardly a trace of even the letters or art that were rivalling those of Cordova and Seville when Peter preached the first Crusade. The wide learning once taught at the Azhar had dwindled to lectures on the Koran and the traditions of the Prophet, the study of the Arabic language, calligraphy, and elementary arithmetic, and geography; while most of the colleges attached to the other great mosques had sunk nearly to a level with the primary schools, which in their turn, although—thanks to their *wakfs*—still numerous, had ceased to teach anything beyond the recitation of the Koran. The French occupation was too short, and its main work too purely military, to leave room for any attempt at educational reform. The country was exhaustively surveyed, and many administrative improvements begun, but in the matter of public instruction Menou left it in 1801 as Bonaparte had found it three years before. Nearly a quarter of a century later, however, the ambition and military necessities of Mehemet Ali supplied the impulse to a revival which, although discouraged by Abbas Pasha and only feebly assisted by Saïd, has attained proportions during the present reign that fairly entitle it to be called the intellectual *renaissance* of Egypt.

The first difficulty encountered by Mehemet Ali, in resolving after his successful Wahabite campaigns to complete the organisation of his army on a European basis, was the want of officers, both combatant and administrative; and to supply this he opened in 1825 a staff school at Cairo, under the direction of an intelligent young Turk, whom he had had specially trained in France with a view to this reform. This was followed by a medical school for the education of army surgeons, by special schools for military engineering, gunnery, veterinary medicine, languages, practical mechanics, and agriculture, the professors in which were mostly Frenchmen or natives educated in France, and the whole of the pupils, as they became fit, were drafted into the State service. The success of these institutions encouraged an extension of the experiment, and during the next two or three years many Government primary schools were opened in Cairo, at Alexandria, and in the chief provincial towns, as nurseries for the higher seminaries. Education in the whole was not merely free, but the pupils were lodged, clothed, fed, and even paid a small monthly wage at the expense of the Government. The result fully answered the expectations of the Pasha. Within little more than five years from the opening of his first school, a numerous staff of sufficiently-trained officers enabled him to complete his scheme of military reform, and in 1832 he began his rebellion against the Porte, with perhaps the best-organised Eastern army that had till then ever taken the field. The victories of Homs, of Beylan, of Koniah, and Nezib, again, on a larger scale than in the Hedjaz, proved the immense advantage of the new over the old system of tactics and drill; and while the war lasted the schools which had contributed so

much to these results continued to receive liberal State support. With the reduction of the army, however, after the peace of 1840–1, these military seminaries lost their *raison d'être*, and with it practically ceased the Viceroy's interest in educational reform. The schools themselves indeed remained open, but the movement languished till, from having numbered more than 20,000 pupils, they reckoned only 11,000 at his death. Under the reactionary Abbas the whole were closed, and for nearly six years public instruction in Egypt was again reduced to the elementary curriculum of the mosque colleges and primary schools. Saïd Pasha, more liberal, re-opened several of the special seminaries, and munificently assisted the foreign schools in Cairo and Alexandria, which, as we shall see, have rendered good service to Egyptian education, but he lacked the energy to prosecute the reform begun by his father; and at his death in 1863 the medical school in Old Cairo was the only one of the Government academies in at all prosperous operation. Like his predecessor, too, he had done nothing whatever to improve the condition of the old Arab primary schools, which remained as the Mamlouks—it might be said the Saracens—had left them.

In the matter of public instruction, therefore, as in much else, the present Viceroy, on his accession, found before him a wide field for reforming activity, and he soon disclosed a policy of working it, not merely in the interest of the army, but of the whole population. The military academies were reorganised on a basis of much greater efficiency than under Mehemet Ali, with the result, it may be here mentioned—as fuller description of these army schools does not properly fall within the scope of this chapter—that except such as were com-

missioned during the preceding reigns, there is not now an illiterate officer in the Egyptian army, nor is even a corporal promoted from the ranks without a knowledge of at least the "three Rs." A brief sketch of the three systems of scholastic machinery now at work in Egypt, over and above these military academies, will convey some idea of what has been done thus far for popular education. These are (1) the schools established and wholly or in part supported by the Government; (2) the old mosque colleges and Arab primary schools; and (3) the schools belonging to the non-Mussulman native communities and the various foreign colonies which, although not under State control, are very liberally assisted by the Khedive.

The first of these groups comprises nine specially "Government Schools," the pupils of which being fed, clothed, and lodged by the State, are for the most part, at the close of their course, drafted into one or other branch of the public service; a School for the Blind; two Girls' Schools, a Normal School; and twenty-three Municipal Schools, which supply a good primary and secondary education gratuitously to those who cannot afford to pay for it, and at a very moderate cost to those who can. The nine special schools are—the Polytechnic, the Book-keeping and Surveying, the Law and Languages, two Preparatory, the Industrial, the Medical and Pharmaceutic, the Midwifery, and a third Preparatory at Alexandria, the eight others being all at Cairo. Although registered separately, the first three of these and one of the two Cairene preparatory schools are located in the same building, and are in reality rather divisions of one great establishment than distinct institutions. In the Polytechnic section—the most advanced of the whole, but which last year reckoned only thirty-

three pupils with thirteen professors—the course of study extends over six years, and includes the higher mathematics, chemistry and physics, geology, mechanics, Arabic, English or French (at the option of the student), geography, history, and drawing. The instruction given in this school—which, and the next two, are grouped together in the spacious old building of the Garb-el-Gamamîs [1]—is in all respects thorough, and the results, as shown at the yearly examinations, do real credit to its teaching staff, only one of whom, the drawing-master, is a European. The Book-keeping and Surveying School educates another class of employés, who are instructed, as its name indicates, in account-keeping, land-surveying, Arabic, French or English, writing, and drawing. It last year registered only twenty pupils, all resident, with the disproportionate staff of twelve professors, of whom the same drawing-master as in the Polytechnic was the only Frank. In the Law and Languages School the course is four years, and comprises Mohammedan and comparative European law—with now especial reference to the mixed code recently framed for the new tribunals—history, the Arabic, Turkish, Persian, French, and Italian languages, and Arabic and Roman writing taught by eleven professors (the director and one other only being Europeans) to thirty-five

[1] In the same building, which also lodges the Ministry of Public Instruction, is the splendid Oriental library, founded in 1871 by Ali Pasha Moubarek, which is especially rich in illuminated and other MSS. of the Koran and its commentaries, collected mainly from the principal Cairene mosques. "Toutes les splendeurs de l'arabesque," justly says Dor Bey, "tout brillant coloris des miniatures Orientales, tous les fantastiques caprices des majuscules Arabes se sont donné rendez-vous dans ces larges in folio, qui, par le fini du travail et la beauté des couleurs, surpassent de beaucoup les magnifiques missels ou livres d'heures qui font l'ornement de nos bibliothèques, les dessinateurs d'ornementation y trouveraient une mine inépuisable des richesses."

students, of whom twenty were residents. Most of the native judges and subordinate officers of the new Courts have been educated in this school, which must acquire increased importance as a nursery for both magistrates and pleaders, as the reforms now in course of experiment take root and prepare the way for a purely national judicature.

Of more immediate, both official and popular, value, however, is the Medical School at Kasr-el-Aïn, which, founded in 1827 by Mehemet Ali, closed by Abbas Pasha in 1849, and reopened by Saïd in 1856, has since then, under the teaching of such celebrities as Professors Clot Bey, Reyer, Lautner, Bilharz, Griesinger, and other French and German specialists, restored Egyptian medicine to the rank of a science, and replaced the Frankish quacks of the last generation by a native faculty which has no equal in the East. The Mohammedan prejudice against dissection has here long been got over, and the latest results of Western pathology having been freely accepted, this college of Kasr-el-Aïn now yearly turns out physicians, surgeons, and apothecaries, many of whom would not discredit our best European schools. Its curriculum extends over five years, the first two of which are devoted to further pursuit of the general education already begun in the lower schools, and the remaining three to exclusively medical studies. Last year its classes—taught by eighteen native professors, mostly educated in Europe—were attended by 195 pupils, of whom 175 were residents, bound at the close of their course to enter the army or the civil service, and twenty independent outsiders who, though paying nothing for their instruction, are free to follow private civilian practice where they will. Up till recently, a relic of the old militarism of Mehemet Ali still survived in this

institution, in the manner in which its classes were recruited. The resident vacancies were annually filled by an arbitrary draft of youths from the preparatory *lycées*, three-fourths of whom were apportioned by lot to the medical, and the remainder to the pharmaceutical section of the school, without reference to individual taste or aptitude in any way. This method of impressment, which was applied also more or less to the Polytechnic and Surveying Schools, may have been necessary forty years ago, when Government education meant only enforced preparation for the army, and was dreaded accordingly; but as this is no longer so, and education is now becoming every year more popular for its own sake, the practice operated injuriously alike upon the schools and on the branches of the public service of which they formed the nurseries. Amongst numerous other reforms, the present Minister has abolished this arbitrary method of allotments, and the pupils are now permitted to choose and specially prepare for their own careers. A large and excellently organised hospital in connection with this school furnishes ample means of clinical instruction to the students, and gratuitous medical treatment to all comers, irrespective of race, nationality, or religion. Attached to it also is the School of Midwifery, in which thirty young native women, also wholly maintained by the Government, are taught reading, writing, arithmetic, the elements of medical science, and obstetrics. After passing through a three years' course of instruction, they are certificated and sent into the provinces, where the common prejudice of Arabs and Copts shuts the door against male practitioners of this speciality. Next in importance to this flourishing medical college ranks the Industrial School at Boulak, the river port of Cairo, which though

founded only in 1867, is already, as an agent of technical education, rivalling the success of its mature neighbour of Kasr-el-Aïn. Just as the latter fitly adjoins the military and civil hospital, so this Boulak school forms part of the great establishment which groups together the Government printing-office, the cannon-foundry, and the railway workshops; and here again the instruction given, during a course of at first three, but now of five years, is most complete. Besides mathematics, chemistry, drawing, topography, and English or French, the pupils are taught nearly every branch of practical mechanics, but especially engineering. Last year they numbered forty-four, all residents, with a teaching staff of six natives and three Europeans. The passed students of this school have already largely replaced foreigners as engineers and mechanical directors on the various public works and in the Government and Daïra factories, in which also the working hands are now almost entirely natives. Of the two metropolitan Preparatory Schools whose pupils, after an elementary course of four years, pass to one or other of these higher institutions, that in the same building with the Polytechnic, Surveying, and Law Schools last year registered an attendance of 192 pupils, of whom 157 were residents, with a staff of thirty-four native and four European masters. The instruction here given includes rudimentary mathematics, geography, history, drawing —an accomplishment, it may be remarked, which is taught with great success in all these schools—Arabic and European writing, and the Arabic, Turkish, English, French, or German languages. The other school of this class, also in Cairo—in the old Mamlouk palace that lodged Bonaparte's short-lived Institut d'Egypte—was one of the earliest scholastic creations of Ismaïl Pasha, having

been founded in 1864 the year after his accession, and in respect of organisation and efficiency is surpassed by no other school of its kind in Egypt. Its course, which also extends over four years, is similar to, but a degree more elementary than, that of the school last noticed, and for the Moslem lads of its lower forms includes instruction in the Koran. Its muster-roll last year showed the large attendance of 539 pupils, only sixty-nine of whom were non-resident; of its staff of thirty-four masters but two are Europeans. The third of this triad of preparatory schools is at Alexandria, and also dates from 1864. In organisation and course of instruction it is a close counterpart of the second, with, however, only 298 pupils (twenty-three outsiders) and a teaching staff of twenty-one, of whom only the drawing-master is a European.

These nine special schools thus collectively educate 1,386 pupils, 1,218 of whom are residents—taught by a net staff of 136 masters, allowance being made for twenty-two doing double duty. For the year this is a diminution of forty-nine in the number of pupils as compared with 1874.

More interesting, however, than the whole of these male seminaries, as an evidence of progress and of the lead Egypt is taking in Eastern civilisation, are the two Girls' Schools, which, though not yet three years in existence, are now admirably educating nearly 450 Moslem, Coptic, and other girls as, since the Hegira, women in the East, have never been educated before. It is to the Princess Tshesma Haft Khanum, the third wife of the Khedive, that the initiative of this great reform is due. Three years ago the only public schools for girls in Egypt were that conducted with exemplary self-sacrifice by Miss Whately, and another by ladies of the American

mission. But these, although attended by a few Moslem children, were but as a drop in the ocean for the great mass of the Arab population. The deeply-rooted popular prejudice against female education had, however, baffled every attempt of the Government to supply this primary condition of social reform, till, in the spring of 1873, the third wife[1] of the Khedive lent the prestige of her sex and her position to the effort. Under her auspices, and at her private cost, an old palace in one of the most populous quarters of Cairo was purchased, in great part rebuilt and adapted to the necessities of school life, with accommodation for 200 boarders and 100 outside pupils. Even thus sponsored, however, the scheme was so far in advance of public opinion that, although it appealed to the poorest classes, offering free board, lodging, clothing, and education to all who chose to come, it was with difficulty the first batch of pupils was obtained. But, the spell of prejudice once broken, the school rapidly filled with both residents and outsiders, and since then the applications have been many hundreds in excess of the accommodation. The pupils, ranging from seven to twelve years of age, are of all ranks, races, and creeds known to Egypt —from Pashas' daughters to slave-girls; Arabs, Copts, Nubians, Jews, and Levantine Christians of every cross of blood. The course of instruction, which will spread over five years, includes reading, writing, arithmetic, drawing, geography, Turkish, French, music, the Koran (for Moslem pupils), plain and ornamental needlework, cookery, laundry, and general housework—all thoroughly

[1] It may be here remarked that although the Khedive himself, who was reared under the social customs of the old *régime*, has three wives, his sons have only one each, and the fashion thus influentially set is now generally followed in the upper ranks of native Cairene society. In fact, among the new generation monogamy may now be said to be the rule.

taught by a staff of fifteen masters and mistresses, two of the latter of whom and the directress are Europeans. Periodical lottery sales are held of all needlework beyond the personal clothing of the pupils, and the proceeds given to a dowry-fund for the poorest girls.

The great success of this first effort to rescue Egyptian womanhood from the ignorance and apathy of harem-life, and so to lay the true foundations of a really national education, soon led to the opening of a second school with a less extensive course, mostly with a view to domestic service, in another part of the capital, where, under a staff of nine teachers, of whom the directress and one mistress are Europeans, 147 pupils (76 boarders and 71 outsiders) were last year maintained and instructed at the charge of the Khedive's first wife. Both these institutions, adequately endowed by their foundresses, are now under the control of the Ministry of Public Instruction, and rank amongst the most flourishing and important of the schools of Egypt. A third is in course of erection, and will be at work before the close of the present year, and, in compliance with numerous petitions, arrangements are in progress to open others in the chief provincial towns. In fact, popular prejudice has been completely overcome, and if this movement in favour of female education be continued, as there is every reason to hope it will, in another generation the most essential of Eastern reforms —the social emancipation of women—will in Egypt be an accomplished fact.

The first established School for the Blind is also little more than two years old, but it last year usefully instructed eighty-eight non-resident pupils in arithmetic, Arabic grammar, and the Koran, for all of which an excellent series of raised-letter text-books has been pre-

pared and is in successful use. Similar instruction is given in a second recently-opened school of this class, in addition to which the pupils—many of them adults—are also taught mat-making, knitting, wood-turning, chair-making, and other handicraft suited to their condition.[1]

The Normal School, which is also a recent addition to the system, is an effort of great importance to raise the level of education in the Arab primary schools, by training a class of masters of much higher qualification than the present illiterate *fikis* and *moadibbs*. With this view, instruction was last year given in mathematics, geography, history, writing, elements of physics, and the Koran to thirty-five non-residents, chiefly recruited from amongst the most promising students of the Azhar, who, if qualified at the end of a two years' course, are appointed to country schools, with a fixed salary, and the prospect of further promotion. In connection with this institution, there are also classes for actual teachers of primary schools who desire to improve themselves, and so qualify for Government pay and employment. These persons receive gratuitous instruction and a pound a month till they either succeed or fail, during the same term, in passing the necessary examination.

Of the twenty-three municipal Civil Schools which complete the roll of the purely Government institutions, perhaps the most important, though not the largest, is that founded three years ago by Prince Tewfik Pasha, the heir-apparent, on his estate at Kobbah near Cairo, where, in addition to a very complete course of secondary instruction, practical farming is taught to ninety pupils, fifty of whom are boarders and the remainder gratis outsiders. This institution, like the two girls'

[1] A second school for the blind has since been opened, and is now in vigorous operation.

schools, is wholly supported by its founder, and so costs the education budget nothing. Besides it, there are sixteen other schools of this class, in or near Cairo, which receive no boarders, but, as before remarked, provide free instruction for those who cannot afford to pay for it, and levy only a trifling charge for those who can. These last year collectively registered 1,683 pupils. In Upper Egypt, three similar schools have been established in the towns of Beni-souef, Minieh, and Assiout, which together educated 631 pupils; but of these 502 were residents, fed and clothed at State cost. A fourth is in successful work at Benha, in Lower Egypt, 233, all residents; and finally two in Alexandria (of which one was founded and endowed by Rattib Pasha) complete the tale with respectively 139 and 129 *externes*.

During the past year this list of Government institutions has been increased by the establishment of three industrial schools, in which the least promising pupils of the primary schools are taught trades, instead of, as was formerly the custom, being drafted into the army. In these the instruction is free, and half the proceeds of the work done—less a deduction of five per cent. for pocket-money—is applied towards forming a fund to provide the pupils with free kits of tools and other aid to a start in life at the end of their five years' course.

Next in official order after these Government seminaries come the mosque colleges and Arab primary schools, which are mostly supported by their own endowments (*wakfs*), and, with few exceptions, are independent of State control. At the head of this second category stands the great college of El-Azhar ("the splendid"), the oldest mosque in Cairo proper, and which has long been famous as the chief university of Islam. Last year this great centre of Moslem learn-

ing registered 11,095 students, attracted from all parts of the East, and representing in unequal proportions the four rites or sects into which Soonee orthodoxy is divided,[1] lectured by no fewer than 325 sheikhs or professors. Each "nation" has its separate *riwack*, or cloister, with its library and staff of teachers proportioned to the number of its *moogawareen*. The present chief sheikh, or head of the mosque, belongs to the Hanafee rite, and has at all times been an important personage in the official hierarchy of Egypt. The present occupant of the post is Sheikh-ul-Islam for all the dominion of the Khedive. As might be expected, the instruction here given is much less liberal and modern than the curriculum of the upper Government schools. It is in fact, as before remarked, limited to the mental gymnastics of Arabic grammar, logic, rhetoric, Koranic law and theology, and to such a smattering of pre-Copernican astronomy and mathematics as is requisite for an almanac-maker, or the timekeeper of a mosque, with a view to precision in the hours for prayer; for it is still both "science" and doctrine at the Azhar that the earth is flat, that the sun moves round it, and that the sky consists of seven superimposed canopies. At the Government schools reason and knowledge ridicule this old-world dogma, but here in the mosque faith clings to it still. Before the secularisation of the mosque lands by Mehemet Ali, the Azhar enjoyed large endowments, but these are now reduced to the rents of some adjoining houses, which

[1] The Hanafeeites, the Shafeeites, the Malekites, and Hambalites, called after the four great doctors of Soonee theology. The first of these includes nearly all Turkey and the remoter East, the second most of Egypt and Syria, the third North-western Africa and Morocco, and the fourth (which sent only twenty-three pupils last year to the Azhar), the Wahabees of Central Arabia, and a few fanatical sectaries of Bagdad and Nablous.

merely suffice to furnish rations of bread and beans to a majority of the students, who, however, further receive from the Government distributions of clothes and provisions during Ramadan and on the occasion of the other great religious festivals. The instruction is of course free, as the professors are unpaid, and maintain themselves by private tuition, copying the Koran, and other clerical work. Up till 1872 these sheikhs were, in a manner, self-elected; but in that year the Government interposed with an order that for the future they should be admitted to teach only after passing an examination in their respective subjects, and should be classified in three grades, promotion from the lower to the higher of which should also depend on a similar test of qualification. The result has already been a marked improvement in the quality of the instruction given; but even yet, for all modern and practical purposes of education, this great college is centuries behind the secular State schools.

The other principal *medresseh* are those attached to the mosque of Ahmadi at Tanta, and to that of Ibrahim Pasha at Alexandria, the former of which was last year attended by 3,827 students, with thirty-six professors, while the latter registered respectively 413 and sixty-five. The instruction given in these seminaries is similar to, though more limited than, that provided at the Azhar, and, like the latter, both are supported mainly by their own endowments.

Comparatively wide, however, as are the scope and influence of the institutions thus briefly noticed, the true measure of instruction among the great body of the fellaheen is supplied rather by the *koulttábbs*,[1] or Arab primary schools, most of which date back from the

[1] Properly *makatibb* in the plural.

early years of Moslem rule in Egypt, and rank, educationally, below the Irish hedge-schools a quarter of a century ago. As every village possesses one or more of these elementary nurseries of learning, the total number of them throughout the country probably exceeds 5,000, the whole of which were, up to three years ago, entirely free from Government control or inspection in any way. Last year, however, a sort of educational census was taken, which, though confessedly imperfect, registered an aggregate of 4,685 *kouttâbbs*, attended by 111,803 pupils. Of these, Cairo returned 265, with 8,875 scholars, and Alexandria respectively 137 and 3,114; the remaining 4,283 and 99,814 being scattered throughout the other fourteen provinces. About half these primary schools have, or originally had, small endowments; but between these and the others which depend wholly on the voluntary contributions of the pupils—averaging a piastre a week each for those who pay anything at all—there is little or no difference in either the method or quality of the instruction given. The chief aim and limit of the whole are to teach the reading and learning by heart of the Koran, supplemented or not by writing and the most elementary arithmetic, beyond which modest range the scholarship of the *fiki* (teachers, plural properly *foquah*) seldom or never extends. Many of them, indeed, are not merely illiterate, but blind to boot, and depend on their great powers of memory and the adroitly used help of an *arif*, or monitor, for at all decently acting their part. Their emoluments however are, as a rule, on a par with their qualification, averaging commonly not more than an Egyptian pound (20s. 6d.) a month.[1]

[1] The maximum salaries of the teachers in the secondary schools under Government control are 750 piastres (about 7*l.* 14*s.*), and the minimum 200 piastres (£2 1s.) a month.

In the case of schools with endowments, this modest wage is supplemented during the month of Ramadan with gifts of a tarboosh, a piece of white cotton for a turban, and another of blue stuff for the usual long blouse, from the funds of the *wakf;* to which the wealthier parents add gratuities of a few piastres as soon as their children can read or have learned by heart one or more of the 114 chapters of the Koran. As the office of schoolmaster, too, of whatever grade, is looked upon as semi-clerical, the *fiki* further adds to his earnings by reciting the sacred book at funerals, marriages and circumcisions, where he is always a welcome, and generally a remunerated guest. Within the past couple of years, most of these primary schools have been induced to submit themselves to the Ministry of Public Instruction, to the extent of accepting periodical inspection, and in many instances a higher class of teachers furnished from the Normal School. But a few still conservatively resist State interference, and remain at the low ebb they sunk to after the Turkish conquest.

Still, rude and limited as is the instruction provided by even the worst of these *kouttabbs*, they educate the great mass of the fellaheen up to a level which, low though it be, is much above that reached by the Mussulman peasantry in Turkey proper, amongst whom ability to spell out the Koran and scribble the simplest *mektoub* is a very rare accomplishment indeed. Any very considerable improvement of these primary village schools must, however, of necessity be a work of years, as their very number and the cost of a higher class of teachers preclude rapid reform. But the policy of Riaz Pasha, the present Minister of Public Instruction, is to gradually bring the whole under State control, and by a

better administration of their endowments, to increase the pay of the *fiki*, and so attract higher qualification, without either unduly swelling the education budget, or sensibly adding to "local rates." Much may, no doubt, be done in this way; but even Pharaoh can no longer make bricks without straw; and progress in public instruction, like the extension of railways or canals, must be regulated, not by what there is room for, but by what the country can afford. At present, without reckoning the military and naval academies (which are charged to their respective ministries), or the liberal donations made by the Khedive from his privy purse to the non-Moslem and foreign schools, and exclusive, of course, also of the *wakfs* by which most of the mosque colleges and primary village schools are wholly or in part supported, its education budget costs the Egyptian Government above 40,000*l.* a year,[1] to which the Khedive adds 12,500*l.* a year, the rent of the Wady estate; against less than 50,000*l.* a year, similarly spent by the Porte on a population nearly seven times as large. True it is that much of this amount is absorbed by the board and clothing of pauper pupils, and so does not represent outlay on pure teaching; but without such bribe of free living, few or none of those who benefit by it could be lured to education at all.

It remains to notice the native non-Moslem schools and those belonging to the foreign colonies, which form nearly as important an element in the educational resources of Egypt as either of the groups thus briefly sketched. Of the former, the Copts have in all twelve in Cairo, one in Old Cairo, one in Ghizeh, and two in Alexandria. Of these, the most important is

[1] In 1862, the last year of Saïd Pasha's administration, the amount thus applied was only 3,750*l.*

the college attached to the Patriarchate, which last year registered 379 pupils—forty boarders and 339 externs—of whom 302 were Copts, sixteen Moslems, one a Jew, eight Armenians, five Greeks, four Greek Catholics, two Armenian Catholics, and one a Syrian, to whom thirteen masters taught Arabic, Coptic, English, French, geography, writing, and singing. A theological school at the same time trained twelve non-resident candidates for the priesthood, teaching them divinity, Coptic, Arabic, and church chanting. A third seminary, the college of Hart-Saqqaïn, was attended by seventy-four non-residents, of whom seventy-one were Copts, two Moslems, and one an Armenian Catholic, who were instructed in Arabic, Coptic, English, French, writing, and arithmetic. In the same quarter is also a girls' school, in which 45 pupils, all Copts, were taught Arabic and needlework; and near the Esbekieh is another, where 80 girls received similar instruction. The remaining seven schools in the capital, as also those in Old Cairo, Ghizeh, and Alexandria, are primary schools attended only by Copts, and last year mustered altogether 244 pupils, who learned Arabic, Coptic, writing, and elementary arithmetic. The total cost of these Coptic schools was last year 201,518 piastres, towards which the Khedive contributed 109,688 piastres, being the rent of 1,500 feddans of land given by his Highness as an endowment: of the remainder, 20,000 piastres was derived from house property belonging to the schools, and the balance from the Patriarchate, which controls the whole. The Catholic Copts have besides several primary and secondary schools, chiefly in Upper Egypt, at Assiout, Takhta, Akhmin, Ghirgeh, Kenneh, and Nagadeh, in which last year nearly 300 children received instruction.

Besides several primary schools in Cairo and Alex-

andria, the Jews maintain in both cities a large free school for children of their own community. In the metropolitan seminary 175 boys and the same number of girls were last year taught Hebrew, Arabic, French, Italian, writing, and arithmetic; and in that in Alexandria similar instruction was given to 127 boys and 145 girls, of whom seventy of each sex were native Egyptians, and the remainder Israelites of other nationalities. There is also another Jewish boys' school in Alexandria, in which a tithe of the fifty-five pupils are free, and the rest charged a small weekly fee. But these institutions furnish no complete measure of the state of education amongst the Jews of Egypt, as both boys and girls of this community largely frequent the numerous foreign schools in operation throughout the country, to such an extent, indeed, that an illiterate Egyptian Jew is now rarely met with.

The rayah Greeks support two free schools for boys and girls at Cairo, in which respectively 140 of the former are taught Greek, French, Arabic, arithmetic, mathematics, geography, and history; and 120 of the latter learn Greek, French, history, geography, arithmetic, needlework, and music. In Alexandria, where this community is more numerous, it similarly educates, in two separate schools, 430 boys and 222 girls, of whom, as in Cairo, a considerable number belong to other rites. Indeed, the liberality with which nearly all schools in Egypt are thrown open to all comers, without regard to race, creed, or nationality, is one of the most gratifying features in connection with public instruction in the country.

The Armenians, though availing themselves readily of both the native and foreign schools, maintain only

one free seminary for thirty boys of their own community, at Cairo, in which the course of instruction is limited to Arabic, Armenian, French, and arithmetic.

The Syrian Maronites have primary schools in Cairo, and the Greek Catholics of the same "nation" another in Alexandria; but the whole contribute little or nothing to the educational progress of the country, and call therefore for only passing mention.

Between these native so to speak denominational schools and the large contingent conducted by foreign missionary and other agency may be ranked the two fine "Free, Gratuitous, and Universal Schools," founded in Alexandria and Cairo respectively in 1868 and 1873, under the patronage and with the very liberal support of Mehemet Tewfik Pasha, the heir-apparent. As their programme states, these institutions are "exclusively scientific and professional, and teach no religious dogma whatever, so that men and children of all creeds may come and learn what is needful for their aims in life. Their work belongs to humanity, and they cannot in any case become the instruments of a system or creed, since they recognise only liberty of thought, and morality dissociated from every preconceived idea." So broad a basis, coupled with gratuitous instruction, speedily attracted a heterogeneous crowd of pupils to both schools, the 486 who were registered in Cairo last year including 262 Egyptians of every native race and creed, fifteen English, sixty-two French, seventy-three Italians, twenty-six Greeks, twenty-one Austrians, five Prussians, three Turks, three Russians, three Spaniards, and thirteen of undetermined nationality; while the 256 on the books of the Alexandria school were equally diverse. The course of instruction in both institutions is nearly identical, including Arabic,

English, French, Italian, elementary mathematics, history, and writing. In connection with both are night-schools for adults, which are also largely attended by Arabs, Copts, Jews, Levantines, and Europeans of almost every nationality: the waifs-and-strays of Babeldom who have no time for school-work by day, but who take industriously to it six evenings a week under the attractions here offered. The Khedive is also a generous supporter of these schools, which depend on voluntary contributions for the balance of their expenditure.

The most important foreign day-school in Egypt is the Italian College at Alexandria, founded during the reign of Saïd Pasha, who aided it with a grant of 2,400*l.*, to which the present Khedive subsequently added the gift of a large and valuable piece of ground, the sale of a part of which covered the whole cost of erecting the college building. This institution ranks as a "national college," and as such receives a subvention of 1,200*l.* a year from the Italian Government. The course of instruction includes Italian, Arabic, English (if desired), French, mathematics, book-keeping, natural philosophy, history, geography, writing, and drawing. A majority of its pupils are Jews, and about twenty of the remainder Moslems.

Of the foreign missionary schools, which play so important a part in public instruction in Egypt, the oldest are those conducted by the Sisters of St. Vincent de Paul and the Lazarist Fathers, whom Mehemet Ali encouraged to establish themselves in Cairo in 1844, by a grant of valuable house-property as an endowment. The Brothers of the Christian Doctrine soon followed, and during the next ten years the success of these pioneers and the liberality of the Viceroys attracted further reinforcements of Franciscans, Sisters of the

Good Shepherd, and other educational propagandists of Rome, who, it must be gratefully admitted, have contributed much to the spread of popular instruction in the country. Most of their schools are free, and, although the "national religion" of the whole is Roman Catholic, proselytism is subordinated to sound secular teaching, and the result has been a deserved success both in Alexandria and Cairo, to which their labours have been chiefly confined. Independently of private schools, these Catholic missionary seminaries last year registered 3,132 pupils, as diverse in race, creed, and nationality as those in attendance at any of the schools already noticed.

The schools of the American Board of Missions rank next in importance, and similarly owe their success in great measure to the liberal protection of the Khedive. The first of these was opened in Cairo in 1855, in a building granted by Saïd Pasha, and within the next ten years others followed at Alexandria, Medinet-el-Fayoum, Assiout, Kous, and Mansourah. These have since been supplemented by thirteen others in the chief towns and villages of Middle and Upper Egypt; until last year no fewer than twenty-eight schools, with an aggregate of 1,244 pupils, were in active operation under agents of the Board. Their chief centres of work are at Cairo, Alexandria, and Assiout. In the first of these they have a boys' "college," two girls', and one mixed school; in the second, one boys' and one girls' school; and in the third, one boys' and one girls' school, a "college" for advanced male pupils, a theological seminary for native Protestant candidates for the ministry, and a training-school for female teachers. Nearly the whole of these are free, the cost of their main-

tenance being borne by the Board, aided by grants from the privy purse of the Khedive. Last year, the site of the old building occupied by the college at Cairo being required for one of the civil improvements, his Highness gave instead of it a valuable plot of ground in one of the best parts of the Esbekieh, with a donation of 7,000*l.* for the erection of a new and improved tenement, which will suitably lodge not merely the 150 or more pupils, but the whole teaching staff of missionaries and their families. Although these American schools throw open their doors to pupils of all races and faiths, their chief *clientèle* are Copts, amongst whom Messrs. Ewing, Lansing, Harvey, Hogg, and the other principal agents of the Boston Board, have won deservedly great influence.

Comparable with the best of these American seminaries is the "British Mission School," founded in 1862, and since then personally conducted in Cairo by Miss Whately, the daughter of the late Archbishop of Dublin, who has devoted her life and fortune to the promotion of instruction amongst the fellaheen, with an energy and liberality which have already made her school one of the chief educational forces of Egypt. Last year it gratuitously taught Arabic, English, French, geography, history, and writing (and to the girls needlework), to 150 male and 158 female pupils, chiefly peasants, but also including not a few of middle class and higher rank, whom the excellent repute of the school attracted to its classes. This institution is also much indebted to the generosity of the Khedive, who made a free grant of its site; but it mainly depends on the private fortune of its foundress, and the contributions of English travellers visiting Cairo.

A couple of Scottish mission schools in Alexandria complete the list of the more important of these foreign auxiliaries of public instruction in Egypt. Last year these two institutions, which are also free to the poor, were respectively attended by ninety-five boys and ninety-two girls, of all races and creeds, who, besides needlework for the girls, are taught Arabic, English, French, Italian, writing, arithmetic, and history.

Such, then, is the educational machinery now at work in the dominion of the Khedive. The official inspection of last year, which was confessedly incomplete as regarded the village schools, and omitted also many private ones conducted by foreigners in the large towns, returned a total of 4,817 schools of all classes, with an aggregate of 140,977 pupils in regular attendance. This showed an increase of 1,072 schools and 27,722 pupils on the figures of the preceding year, but the augmentation is no doubt to be explained as much by the greater completeness of this last return as by the actual growth in the number of schools during the twelvemonth. "On the other hand," says the official report, "the inspection of more than one province having been made, either while the harvest was being gathered in, or at the time of high Nile, when nearly the whole population was out in the fields or on the river-banks, the recorded figures often imperfectly represent the average attendance of the year. Such as they are, however, the results now submitted prove a rapid increase, which shows how fructuous and persistent have been the efforts made by his Highness for the spread of public instruction in the country."

Relatively to Europe, the educational level attained by Egypt is not, of course, a high one; but it is still respectable. Thus, while Prussia and Switzerland

register 15, France 13, England 12, Austria 9, Ireland 8, Greece 5, Portugal 2½, and Russia 2 per cent. of their populations as receiving primary instruction, Egypt shows 2¾ per cent. of her motley millions as under regular school teaching of some kind, or, in fact, more than 4 per cent. of her whole male population, seeing how few of her 140,000 odd pupils as yet belong to the other sex.

Such figures form a potent factor in Egyptian progress, and in view of their steady growth from the first year of the present reign, are full of hope for the future, not merely of the country itself, but—from its relation as the natural watershed, so to speak, of civilisation to the whole continent—of Africa at large. Nor could the conduct of this great humanising work well be in better hands than it is at present. Riaz Pasha, the Minister of Public Instruction, like most of the other members of the present Cabinet, was educated in Europe, and is a man of wide and liberal culture; while, as remarked in a previous chapter, his inspector-general, Dor Bey, is a specialist of altogether exceptional qualification and devotion to his work.[1]

[1] Since this was written, Mr. Rogers, formerly H.M.'s Consul at Cairo and lately the Agent of the Egyptian Government in London, has (on the abolition of the Agency) been re-appointed Administrative Director of Public Instruction, a post which he had held for some time, with much usefulness, before his appointment to London.

CHAPTER XI.

PUBLIC WORKS.

The Great Aggregate of these—*Railways*—Principal Lines of the System—Nearly all Constructed during the Present Reign—Their Average Cost—Low Working Cost—Former Abusive Management—The New Administration—The Soudan Line—*Canals*—Their Two Classes—How they Control and Distribute the Irrigation—Great Additions made to the System during the Present Reign—The Barrage—Its Proposed Completion—*Harbour Works*—At Alexandria—At Suez—*Lighthouses*—Details of the Present Service—Its Efficiency—*Telegraphs*—Existing Lines—External Communication—*Bridges*—Kasr-en-Nil—Ghizeh—Others Built during Present Reign.

THE public works of Egypt are so numerous and important that a mere catalogue of those constructed during the present reign would go far to account for the recent great development of both its trade and its debt. The correlation, indeed, of these three chief factors in the situation has been so close that it is not easy to say which among them has been *cause* and which *effect;* for while railways and canals rank for the most part first in order of time, the rapidly reacting growth of trade has forced on the extension of both at a rate which, in its turn, would have been impossible but for the borrowed capital represented by the debt. That some—not to say much—of this last has been wastefully expended, is not to be denied; but the aggregate of railways, irrigating canals, docks, harbours, lighthouses, and telegraphs—nearly the whole of which are already reproductive—still exceeds in value the entire net proceeds of the Egyptian foreign loans. The Suez Canal, usury to loan-mongers, improvident administration, and black-mail to Constantinople, quite suf-

ficiently explain the large surplus of the present public debt. A brief sketch of the more important of these substantial state assets will illustrate, perhaps better than anything that has yet been said, the material progress made by Egypt within the past score of years. At the head of the list, in respect both of cost and immediate revenue value, stand above 1,100 miles of

RAILWAYS.

These are divided into two categories—the *seaward*, or those running north of Cairo, and the *southern*; but, except only the short line of 15 miles from the capital to the sanitarium of Helwân, the whole are now under the European administration, of which General Marriott was last year appointed chief, with Ismaïl Pasha (educated in England) as assistant director. Subjoined are the principal lines of the present working system.

	Miles.
From Alexandria to Cairo (double)	131
„ Tel-el-Barrûd (on the Alexandria-Cairo line, 54 miles from the former) by the left bank of the Nile to Boulak-el-Dakrour, opposite Cairo...	74
„ Boulouk-el-Dakrour to Assiout, the Upper Egypt line	228
„ Benha (on the main line, 29 miles from Cairo) to Zagazig, Ismaïlia, and Suez (double as far as Zagazig)...	129½
„ Assouan to Philæ	5
„ Alexandria to Rosetta	43
Branches from Tanta (54 miles from Cairo on the main line)—	
1. To Dessouk, on the Damietta branch	46
2. To Zifteh do. do.	34
3. To Damietta (double as far as Mohallet-Roh) ...	86
4. To Chibin-el-Kôur	19
From Caliob (below Cairo) to the Barrage	7½
From Zagazig to Mansourah	47
„ Benha to Mitbereh	8
„ Wasta to the Fayoum	41
„ Aboo-Kebir to Salieh	22

Including the duplications between Alexandria and Cairo, Benha and Zagazig, and Tanta and Mohallet-Roh, the mileage thus represented amounts to a total of 1,086 miles, to which have to be added the line of 15 miles to Helwân, and about 25 miles in and around Cairo which are used only for Government purposes, raising the whole to about 1,126 miles, exclusive of 90 miles of sidings at the various stations.

The first line of the system dates from 1852, when Abbas Pasha commissioned Mr. Robert Stephenson to construct a single railway from Alexandria to the capital, in the interest of the then rapidly developing overland traffic.[1] This line was subsequently doubled, and the floating ferry across the Rosetta branch of the Nile at Kafr-es-Zyat (65 miles from Alexandria), where Achmet Pasha, then heir to the throne, was accidentally drowned in 1856 by the train running into the river while the ferry was not in its place, was replaced by a splendid iron bridge of twelve spans, resting on hollow piles, at a cost of 400,000*l.* Five years later the communication between the two seas was completed by the construction of the direct desert line of 90 miles from Cairo to Suez. At the accession of the present Khedive these two lines and a branch of 24 miles from Benha to Zagazig formed the whole railway system of Egypt. The importance of largely increasing it was promptly

[1] Long previously, in 1834, Mehemet Ali had surveys and sections of the desert line from Cairo to Suez made by Mr. T. Galloway, and plant for it was even ordered from England; but French influence was exerted to prevent the carrying out of the scheme, which was consequently for the time abandoned. Four years later, however, a short steam tramway—the pioneer railway of Egypt—was constructed for his Highness at Alexandria by Mr. R. H. Galloway, who, with his brothers, erected nearly all the pumping and other machinery set up for the Pasha during these early years of the Egyptian *renaissance*. The same firm also supplied most of the further machinery erected during the two following reigns.

felt by his Highness, and railway extension advanced at a rate which in a few years spread an iron network over most of the Delta, supplied an alternative route (on the left bank of the river) between Cairo and Alexandria, and invaded Upper Egypt and the Fayoum In 1870 the disadvantages of the old desert line between the capital and Suez—over which water had to be carried daily to feed the locomotives, and which developed nothing along its track—led to its abandonment, and the adoption of a new and longer route, by the extension of the Benha-Zagazig branch for 98 miles along the fresh-water canal to Ismaïlia, and thence nearly due south by the side of the same channel and the maritime Canal to Suez. Of the 245 miles therefore in operation at the death of Saïd Pasha, only 155 form part of the existing network: in other words, including the duplications, the present reign is to be credited with 971 of the whole 1,126 miles which now reticulate the country.[1]

As the earthworks on nearly the whole of these lines have been constructed by *corvée* labour, it is estimated that their capital cost, including a first supply of rolling stock, averaged about 11,000*l.* a mile. But as this again was all borrowed money obtained at certainly not less than 12 per cent. interest, the ultimate cost of the system came fully up to the average of European railways, and their revenue returns must in fairness be also estimated accordingly. On the other hand, the moderate rate of speed at which all the trains are driven—except the one daily express between Alexandria and Cairo, and the mail trains between Suez and Alexandria—and the cheapness of native labour, which is now employed in nearly

[1] Besides these State railways, there is a short line of five miles between Alexandria and its suburb of Ramleh, constructed first as a horse tramway, but subsequently worked by locomotives, and owned by a small private (chiefly English) company.

all branches of the service, enable the working expenses to be kept much below the European average, the respective proportions being about 46 to 53 per cent. of the receipts. The highly-waged English and French engine-drivers and mechanics having been nearly all replaced by well-trained Egyptians, fuel and the rolling stock are now almost the only costly working items; but, as against these, the tariff for both passengers and (especially) goods' carriage is much higher than in Europe. Some modification has recently been made in this last; but the policy of any considerable reduction is questionable, as water-carriage, though cheaper and still considerable in some districts, nowhere effectively competes with railway transport. A re-adjustment of many of the existing traffic charges might be made with advantage to both the public and the department, as the incidence of not a few of them is anomalous and inequitable; but, collectively regarded, neither trade nor industry is unduly weighted by the present average tariffs. Until the recent transfer of the administration to European hands, it was notorious that great frauds were systematically practised on the service, with the connivance of underpaid or dishonest officials; but it may be expected that these will now cease; and, if so, the gain to revenue from this source alone will tell appreciably on the year's receipts.[1]

But great as has been this extension of railways in Egypt proper within the past twenty years, it pales

[1] As an illustration of only one of the many abuses hitherto in costly operation, it may be mentioned that since the appointment of General Marriott to the management of the service an English firm of high standing recently offered to supply similar or even better coal than that hitherto used at 60,000*l.* a year less than the previous contract price. This particular offer was not accepted, but the supply has since been contracted for by tender at rates much below those formerly paid, and with adequate guarantees that the quantities paid for shall be delivered.

before a grandiose scheme conceived by the Khedive, soon after his accession, for the peaceful conquest and development of the vast but hitherto profitless provinces on the Upper Nile, by means of the same agency, employed on a still larger scale. The steam communication between Alexandria and Suez had shortened the overland Indian voyage by several days, but his Highness projected a yet further reduction of it by continuing the iron road from Cairo up through the Soudan to Shendy, the converging points for the camel routes from Khartoum and the White Nile, and thence *viâ* Kassala to Massowah, which would save fully three days' time, and nearly the whole Red Sea voyage. In 1865 a preliminary study was made of the country between Assouan and Khartoum; but, although the report on this was favourable to the proposed scheme, nothing further was done till 1871, when a fresh and detailed survey was executed under the direction of Mr. Fowler, his Highness's chief consulting engineer. In the result, the dimensions of the project were reduced to Wády-Halfa, at the bottom of the Second Cataract—below which the Nile is navigable by steamers down to the First Cataract, and thence again to Cairo—being selected as its northern, and Metemmeh, opposite Shendy, as its southern terminus, the distance between these two points as surveyed being only 550 miles, and that from Shendy to Massowah about 500 more. The work was accordingly begun at Wády-Halfa, on the right bank of the river, in 1873; but financial considerations have delayed its progress and compelled a modification of the line, which, as now finally projected, will run for 150 miles, partly through a wild and rocky desert, in which engineering difficulties unknown in Egypt proper have to be overcome, till it regains the Nile at Kohé, where an iron bridge, con-

sisting of one central span of 80 metres, two of 30 m., and 26 other openings of 18 m. each, will carry it across to the left bank, which it will then skirt for 50 miles further on to Hannek. Here the river will be again utilised up past Ordeh, the capital of Lower Nubia, to Aboo-Goosi, at which much of the caravan traffic from Kordofan and Darfour converges. At this point the iron road will be resumed, and run for a further distance of about 200 miles across the great plain or desert of Bahiuda—not to Shendy, as originally proposed, but to Khartoum, the proper capital of the Soudan, where it will for the present terminate, the proposed extension to Massowah having perforce been abandoned. The original intention of constructing the line within three years has also been necessarily modified, and its progress will now depend on the development of the local revenue, by which the cost of the work is to be defrayed; for the Soudan itself is to bear the whole of this, without any part of it being thrown upon Egypt proper. Mr. Fowler's original estimate for the whole line from Wâdy-Halfa to Shendy was 4,000,000*l.*—or about 7,250*l.* a mile for a narrow-gauge road of 3 ft. 6 in., with light rails weighing 50 lbs. a yard, and the requisite rolling stock—of which 2,500,000*l.* was apportioned to the European part of the work and materials, and the remainder to native labour, and such wood and stone as the country traversed could supply. The elimination of the section between Hannek and Aboo-Goosi will of course reduce this estimate, but not *pro tanto*, as the selection of this latter, instead of Ambakol, as the point at which the line will strike out from the river to cross the desert of Bahiuda, and of Khartoum instead of Shendy as its southern terminus, will add nearly 40 miles to its length in this direction. About 50 miles of the

earthworks, and 40 of the permanent way, are already made south of Wâdy-Halfa, and by the time the Upper Egypt line has been completed from its present terminus at Assiout to Assouan—where a short steam tramway already *turns* the First Cataract to Philæ—Hannek will probably have been reached, and steam communication thus established by rail and river between Alexandria and the heart of the Soudan. Beyond Khartoum the country has also been surveyed by Mr. Fowler's staff, for a still remoter line to Darfour; but this is as yet far *in futuro*, and need not therefore at present engage remark.

CANALS.

Egyptian agriculture being wholly dependent on artificial irrigation, the system of canals by which the yearly overflow of the Nile is caught, stored, and distributed, has at all times ranked foremost among the industrial public works of the country. From the Pharaohs to the Khedive its maintenance in thorough repair has always been the special and anxious care of the Government, since on this, next after the inundation itself, hangs the success or failure of the year's crops, on which in turn depends more than half the year's revenue. Here again, the energy of the present ruler has been conspicuous in improving and extending the network as Mehemet Ali left it[1]—for few or no additions were made to it by either Abbas or Saïd—with the result that the whole now lineally measures more than 8,400 miles, with a water surface of nearly 100,000 square acres. The system comprises two classes of channels, the larger of which (called *séfi*, or summer, canals) are

[1] Mr. Fowler estimates that the extension of the irrigation canals alone during the present reign has involved the excavation of 65 per cent. more *matériel* than the whole of the Suez Canal.

used for both navigation and irrigation, while the smaller ones (called *nili*, or high Nile, canals) serve the latter purpose only. Until the introduction of railways nearly the whole transport of the middle and lower provinces was done by water, and even now the greater cheapness of the old method still secures for it a considerable share in the carriage of native produce to the coast and the chief inland markets. But with two or three exceptions the primary object of the whole 870 odd canals which now reticulate the country is to receive and distribute the precious fluid on which everything depends. Distinguishing the two classes, we find in all 113 navigable canals, 62 of which run through Upper and Middle Egypt, and 51 through the lower provinces. Of the former, the Bahr-Yousuf generally, but inaccurately, gives its name to the long chain of channels that winds down for about 350 miles on the western side of the Nile, nearly midway between the river and the Libyan hills, from Farshoot to a few miles above Cairo. The first action of this great watercourse is, however, more properly called the Moie-t-Soohág, from the provincial capital of Girgeh, whence it takes its name, and past which it runs in a channel nearly forty miles long by more than 300 feet wide, watering the country as far down as the southern districts of Assiout. It is the only canal in Upper Egypt whose annual opening about the middle of August, to admit the swollen Nile, is the occasion of an officio-religious ceremony similar to that which takes place at the cutting of the Khaleeg at Cairo in the same month. The Bahr-Yousuf proper (Joseph's river) taps the Nile above Mellawee, and runs for more than 150 miles, with a width similar to that of the Soohághieh, through the provinces of Assiout, Minieh, and

Benisouef, and then, turning westwards through the opening in the Libyan range behind the latter town, enters the valley of the Fayoum, which it abundantly waters through a great network of branches, one of which empties itself into the Birket-el-Korn, and another, re-issuing from the valley, joins the Nile again above Rigga. Popular tradition ascribes the construction of this great channel to the patriarch whose name it bears, but some geographers regard it as an old branch of the Nile, which, after watering the Fayoum, ran on into the Bahr-bela-ma already mentioned, and so into the Mediterranean westwards of Alexandria. It is only navigable throughout its whole course during the inundation, being nearly dry in several parts during the rest of the year. The Ibrahimieh, which is a work of the present Khedive, and the next greatest channel on the western side of the river, begins near the town of Assiout, and with a width of about 200 feet for one-third of its course and of fifty for the remainder, runs nearly parallel with the Bahr-Yousuf, for more than ninety miles, further watering, with many branches, Assiout, Minieh, and the wide extent of fertile land which the sweep of the river to the Arabian hills, below Behnesa, leaves on its Libyan side. In connection with these canals in Upper Egypt is a chain of vast reservoirs, chiefly the work of Mehemet Ali, which, filled from the river during the inundation, subsequently distribute their contents into smaller basins at a lower level, and so furnish water to the neighbouring land, as needed throughout the greater part of the year.

Of the fifty or more navigable canals below Cairo, the most important are—(1) the Ismailieh, a work of the present reign, which, starting from the river near Boulak, runs in a fine broad navigable channel for nearly fifty-

five miles to the freshwater canal from Zagazig to Suez, and so gives water communication between Cairo and Suez. The connection of this great work with the maritime Canal (by the widening and deepening of the freshwater channel, respectively to 180 and 11½ feet between Zagazig and Ismaïlieh) has been completed, and through navigation for vessels up to 400 tons burthen, paying only half the large Canal dues established between Cairo and the two seas. The new water-way will be worked under contract with the Suez Canal Company for the carriage of produce from Middle and Upper Egypt to Ismaïlieh, for shipment to Europe, in competition with Alexandria. Coals may be thus landed at Boulak direct from Cardiff or the Tyne, and return freights of cotton, sugar, wheat, or seeds be taken back in the same bottoms. (2) The Bahr-Moëz, supposed to be the old Tanitic branch,[1] which begins at Mit-Radi, near Benha, on the right bank of the Damietta branch, and widening through the province of Charkieh, divides near Tell-Basta (Bubastis) into two channels, which empty themselves into Lake Menzaleh. (3) The Chibin-el-koum, a fine canal nearly ninety miles long, which zigzags across the Delta from Quarnyeyn, on the Damietta to Farastaq on the Rosetta branch, throwing out, at the village from which it takes its name, a branch called the Mélig, which joins the Tabanieh canal below Sibél-Nitus, and with the latter empties itself into Lake Bourlos—a course which is almost identical with that of the old Sebenitic branch of the river. (4) The Menoufieh, which crosses the Delta a short way below its apex. And (5) the Mahmoudieh, which connects Alexandria with the Nile at Atfeh, on the Rosetta branch, about twenty-seven miles above the latter town. This

[1] Restored to its present use by the first Fatimite Caliph, *circ.* A.D. 970.

last important channel, which is another of the great works of Mehemet Ali, follows in a part of its course the bed of the ancient Canopic branch, and the old canal of Fooah, which the neglect of the Mamelukes allowed to finally dry up about a century ago. The present channel was begun in 1819, and during the ten months of its construction, by the labour of 250,000 men, it cost 300,000*l.*, and 20,000 lives, which perished by accident, hunger, and disease. Its length from the Nile to Alexandria is about fifty miles, with an average width of one hundred feet, and it is navigable for large river craft throughout the year. Altogether, these greater canals and their navigable branches make up a system of some 1,900 miles between Farshoot and the Mediterranean. As, however, many sections of this are dry during low Nile, the water-way it would otherwise afford for the transport of local produce is broken and inefficient. But much has been done within the past dozen years to remedy this, by deepening the defective channels, and below Cairo especially the inter-communication is now fairly complete.

These main arteries, however, form little more than one-fourth of the whole canal system of the country. In Upper and Middle Egypt, from Assouan to Cairo, there are 348 minor channels which serve only for irrigation. Of these the province of Esneh reckons 9, that of Kenneh 14, Girzheh 19, Assiout 63, Minieh 71, Benisouef 52, the Fayoum in all 111, and Ghizeh 9. In the Lower provinces there are 408, of which Galioubeh has 27, Menoufieh 24, Garbieh 75, Charkieh 181, Dahkalieh 28, and Behera 73. Of this total of 756 canals—measuring in all 6,500 miles—a few in the Delta start direct from the Nile, but the great majority are subordinate ducts—capillaries, so to speak—of the larger

channels, by which the vital fluid is circulated to the arable extremities of the country. Of the whole 840 canals, 112 have been constructed during the present reign, mostly below Cairo, besides 426 bridges—150 in Upper, and 276 in Lower Egypt.

The means by which the yearly inundation is caught and distributed through this great network, over almost the whole cultivable surface of the country, are at once simple and efficient. In Upper Egypt a system of reservoirs, already mentioned, receives and stores most of the supply needed from Assouan to Assiout, below which a less complete chain of similar basins serves in part a like purpose down as far as Ghizeh, the province opposite Cairo. Thence to the Mediterranean, the whole work of storage and distribution is done by canals. Of these, both in Upper and Lower Egypt, the large primary ones tap the Nile at a higher elevation than that of the districts they are intended to inundate, and are themselves again tapped by the secondary channels, which irrigate still lower and remoter levels, and from which, in their turn, branch off yet smaller courses that are again cut, almost at will by the villagers, till the precious fluid is finally distributed as the exigencies of the various crops require. The headworks of the large canals, which issue direct from the river, consist generally of substantial stone or brick-built viaducts, with openings of from ten to fifteen feet wide, which are closable by vertical planks or sheet piling. At intervals down the canal similar dykes are placed to produce successive heads of water, as far down as the annual in-take will feed an overflow into the adjoining fields, or materially reduce the height to which the water has to be raised by manual or other labour. The secondary canals branch from the larger ones through weirs similar to those described, and, like

them again, are dammed at intervals to feed the smaller channels, by means of stone or brick conduits through their banks. Like the Nile itself, where necessary, the whole of these canals are embanked, and the maintenance of their earthworks is a rigorous duty of the adjoining villagers. The depth of water in the navigable canals averages about three feet at low Nile; but, as the beds of the smaller channels are considerably above the ebb level of the river, these latter are, of course, dry during the greater part of the year. Soon after the annual rise begins—about July—the head dams of the larger canals are opened, and the rising volume of water is admitted into the first sections till their banks are overflowed, and the adjoining land flooded; the dykes lower down are then in turn similarly opened, as also those which feed the secondary channels, till the inundation is complete. As in "low" years the supply is insufficient for the whole area to be irrigated, so in over-high Niles there is more water than is required, and the excess is more or less destructive of all the crops near the river. Another class of canals accordingly serves to catch this surplus water, and discharge it into the river lower down. But the existing provision for this method of drainage is still inadequate, and three times during the past ten years great damage has been done by overflows that could not be thus diverted in time. The great annual inundation, which is controlled and distributed in the manner now described, is further supplemented by numerous wells, by many thousands of *sakkias* and *shadoofs*, and a yearly increasing multitude of steam and other pumps, the operation and uses of which will be more conveniently described in our chapter on agriculture.

Extensive as is this great system of canalization, it is still not only insufficient to water all the land that

might be reclaimed to cultivation in Lower Egypt, but it provides imperfectly for even the existing area during the eight months of ebb. To irrigate this adequately would require a constant supply all the year round in the main canals at the same height, and in the same quantity as when the river has risen from twelve to fifteen feet; and to obtain this desideratum the engineers of the French expedition first projected, and Mehemet Ali, nearly fifty years later constructed, the great work known as the Barrage of the Nile, immediately below the apex of the Delta. After experiment of the principle on one of the larger canals, the plans prepared by M. Mougel, a French engineer in the service of the Viceroy, were adopted, and in 1847 the structure, on a much grander and costlier scale than had been suggested to Napoleon, was begun. The scheme consisted of a vast double bridge or viaduct, the western section of which was to span, and by a system of sluices dam back, the Rosetta branch, and the eastern the Damietta. It was estimated that the great work and its necessary complement of new canals would provide for the efficient irrigation of nearly 4,000,000 acres of ground, and by dispensing with more than 25,000 *sakkias* and *shadoofs* would set free for other labour the many thousands of men and oxen employed in working these antiquated machines—a result which, if accomplished, would have been commercially well worth its cost. During the next couple of years the work was vigorously pushed on, with a vast expenditure of money and labour, but soon after the accession of Abbas Pasha it was suspended, and has not since been resumed. The section over the Rosetta branch is, however, nearly complete, and is a structure of fine architectural effect. The river—at this point 506 yards wide—is spanned by a bridge of sixty-one arches of six-

teen-feet span, with a sluice-gate in each opening, and the whole capped by a line of crenellated turrets corresponding in design with loftier towers over the entrance gateways and in the centre of the work. A similar but longer structure bridges the Damietta branch, which is 592 yards wide, but the sluice arrangement is here incomplete; and, except during high Nile, the only water that passes through this section is conveyed by a canal from the other side, and rushes through two or three arches only, the rest remaining dry. It was originally intended to back up the river by this structure about fifteen feet, but owing to the defective foundations it has not been deemed prudent to submit the work to a greater strain than that due to a head of from three to five feet of water, a level which is sufficient for the lands of Lower Egypt without the costly supplement of steam or other pumping.[1]

The urgent want, therefore, of more efficient irrigation than this incomplete work affords, has recalled attention to the necessity of complementing it by other means of supply; and, in considering these, the choice has lain between a system of high-level canals, and the completion and extension of the present Barrage. The view of the Government was at first favourable to the former plan, according to which the Nile would have been tapped either at Queremate, on its right bank about fifty miles above Cairo, or on the left bank at Echment three miles higher up, and, by means of a flatter fall than that of the river, a head of water would have been provided sufficient to supply a regulated irrigation to nearly

[1] At present, navigation is carried on through locks at the Delta end of each section, where a toll of 60 paras (about 1½d.) per *ardeb* is levied on passing craft.

3,000,000 feddans of land below the capital all the year round, thus rendering the greater part of Lower Egypt practically independent of a good or bad Nile. The great cost, however, of either of these schemes led to their abandonment, and it was then decided to utilise Mougel Bey's great work. In 1875, therefore, Mr. Fowler was instructed to exhaustively examine the condition of this structure, and to submit estimates and plans for its completion. This was done early in the following year, and, as the result showed that for an outlay of about 1,000,000*l.*, the work could be made to realise its original purpose, and so supply nearly all the additional irrigation required, it has been decided that this shall be done. Mr. Fowler's scheme is to complete the sluices of the existing Barrage, and to construct a new set on deep and very massive foundations immediately below the down-stream edge of the present work, which, while limiting the pressure on the old foundation to less than five feet, will raise the whole hydraulic head to the required level originally designed. The entire structure will be further strengthened by a broad mass of rubble, incorporated with two lines of béton blocks, traversing the river-bed immediately below the new sluices, and so forming a solid abutment to the whole. When these additions to this great work have been carried out, vast tracts of new land may be at once brought under cultivation, and with the aid of a few additional canals to distribute the precious fluid over the extended area, the complete irrigation of Lower Egypt will have been provided for, with an immense economy of labour and money, as compared with the costly and inefficient system now in use. The result will be an enduring monument for both the sovereign and the engineer to whose joint energy and skill its achievement will be due.

HARBOUR WORKS.

Alexandria.—The modern harbour of Alexandria in which the trade of the port is now carried on lies, as already described, within the upper curve of a bay formed by the two projecting headlands of Ras-el-Teen, on the NE., and Cape Adjemi and Marabout Island on the SW., and measuring six miles in length by an average of two in width. It is landlocked on every side except one, the SW.; the wind from this direction is, however, the prevailing one during eight or nine months of the year, and from time immemorial the "sea" thus occasioned has seriously impeded the loading and discharge of vessels in the roadstead by stone lighters, as the custom has hitherto been. The importance of remedying this great drawback on the convenience of his chief port had been felt by the Khedive from soon after his accession, but it was not till the threatened rivalry of the Suez Canal had emphasised the necessity that he finally decided on carrying out a work of such magnitude and cost. Accordingly, in 1870, a contract was entered into with Messrs. Greenfield and Co., an eminent English firm, for the construction of a great breakwater, an inner harbour mole, and a line of quays, which should, together, afford the requisite shelter and increased accommodation needed by the growing trade of the port. After some months spent in the necessary preparations the work was begun in the spring of 1871, when the Khedive in person laid the foundation stone. Since then the original plan has been considerably modified, but it will be sufficient to mention its ultimate lines as now in great part carried out. Commencing at a point fifty metres SW. of the Ras-el-Teen lighthouse, the outer breakwater extends first in this latter direction for nearly 1,000 metres, and then, curving to SSW.,

runs in a straight line 2,350 metres further, or, in all, above two miles across the mouth of the harbour, enclosing an area of more than 1,400 acres of still water, deep enough for vessels of the largest class. The principal entrance to the port is now, therefore, round the south-western end of the breakwater, which is 1,500 metres from the shore, while the narrow passage off Ras-el-Teen affords ingress and egress only to small craft and shore boats. As in the case of the great moles at Port Saïd, this outer sea-wall has been constructed, up to the water-level, of huge blocks of concrete, manufactured at the neighbouring Mex quarries, of sand and Theil lime, and deposited pell-mell on the sea side, with an inner front of rubble. The upper portion of the work, which is of solid masonry, rises ten feet above the lowest, or seven above the highest sea-level,[1] and is of a uniform surface width of twenty feet. In all, about 25,000 concrete blocks, weighing twenty tons each, and 130,000 tons of large and small rubble stones, have been sunk in the foundations of this great work. Shorewards the scheme comprises a broad mole, stretching out 900 metres from the mouth of the Mahmoudieh Canal and the harbour terminus of the Cairo railway, towards Ras-el-Teen; and a line of quays, 1,240 metres long, extending from the same point along the Marina to close upon the Admiralty Dock. Like the inner mole, these quays are based on a deep rubble foundation, with a superstructure of solid masonry, and when completed will have abutting iron jetties, alongside which ships may load and discharge in all weathers. A

[1] The maximum rise of tide here is twelve inches, but the level of high Mediterranean, when the water is forced up the Levant by westerly gales, is three feet above the level of low Mediterranean, caused by gales from the eastward.

branch railway will connect the mole and quays with the Alexandria and Cairo line, and thus with the whole railway system of the interior; so that when the line now in advanced progress to Khartoum is completed, the abundant produce of the Soudan—which is at present all but wholly shut out from the Western markets—will be carried to the Mediterranean almost in fewer days than it has hitherto taken months by the slow transport of river and caravan.

The necessary complement of this undertaking—the total cost of which will exceed 2,000,000*l.* sterling—will be the removal of the ledge of rock in the mouth of the harbour known as the Three Fathoms Shoal. Dangerous even in daylight, this obstruction practically closes the port between sunset and sunrise; and as the increased power of modern cannon has deprived it of all strategical value as a protection against hostile shipping, its removal has now become, so to speak, a corollary of Messrs. Greenfield's great work. Already the harbour dues of 4*d.* a ton on vessels with cargo, and 2*d.* on those in ballast,[1] levied since the completion of the breakwater, yield about 130,000*l.* a year, and it is estimated that little more than a twelvemonth's receipts of these would cover the cost of blasting and clearing away this now sole impediment to safe and easy entrance to the port at any hour or in any weather.

Suez.—The works at this port, though less extensive and costly than those at Alexandria, are still only second to these latter in magnitude and importance. The idea of them was originally limited to a dry dock, the want of which was soon felt by the Peninsular and Oriental Company after beginning, in 1842, the mail and passenger service between England and India, *viâ* Egypt.

[1] Coasting steamers pay only half rates, and sailing coasters only 2*d.* per ton once a month.

There was at that time no accommodation for repairing vessels south of the Isthmus nearer than Bombay, and the Company therefore strongly urged the Egyptian Government to erect either a gridiron or a floating dock at Suez to supply the want. The application was however persistently refused till 1861, when the Messageries Impériales Company appeared as rivals in the field of navigation east of the Gulf, and—French influence being then in the ascendant at Cairo—obtained almost in a month what had been denied to the English for nearly nineteen years. The maritime Canal had been begun, but even in France there were sceptics as to its success, and it was felt that in any event a graving dock at Suez would still be of use to the fleet of steamers with which the new Franco-Chinese mail service was to be carried on. A concession was accordingly obtained by the French Company from Saïd Pasha for the construction of a dock at a cost of 7,000,000 frs., to be borne by the Egyptian Government, and in 1862 the work was begun by Messrs. Dussaud Frères, a well-known firm of French engineers, who had already executed similar works at Cherbourg and Marseilles, and who subsequently also made the harbour at Port Saïd. The point chosen for the new dock was at the head of the roadstead, about a couple of miles south of the town, where a space was dredged sufficient to give an enclosed area of 410 ft. long, by 90 ft. wide, with a depth of 36 ft.—on an axis WSW., and ENE.—the excavated soil of which, deposited round it, soon hardened into good ground with a surface a metre above high-water mark, for the pumping engine-house and the other necessary buildings. The enclosing walls and entrance piers, 80 ft. apart, are of the most solid masonry, and the length of the dock can be reduced to 390 ft. by means of a massive shifting caisson which

forms the outer gate. During the progress of the work the contractors received from the Government a further sum of 1,500,000 frs., in commutation of native forced labour which was to have been supplied by it, to which a few other small amounts were also added, raising the total cost of the undertaking to about 350,000*l.* The dock was opened in 1866, and it was then intended merely to add to it a line of quays right and left of its entrance, respectively for the use of Government and merchant ships; but in view of a large expected increase in the local trade, the Viceroy decided in constructing a complete artificial harbour large enough to provide for any eventuality. Messrs. Dussaud accordingly designed a port capable of indefinite extension, and, after some delay, the new further works on this were begun in 1870. These comprise a large outer basin (now called Port Ibrahim), divided by a broad and massively-built mole, 1,700ft. long, into two sections, one for men-of-war and the other for commercial shipping, and quays running north and south—enclosing altogether an area of more than 100 acres of water surface, with a minimum depth of 23ft., and a total quay frontage of 10,500 ft., alongside which nearly thirty of the largest ships may load or discharge at one time. The rapid success, however, of the Canal having almost destroyed the transit trade of Suez, the works were suspended in 1875, leaving the full scheme incomplete, but with finished accommodation more than sufficient to meet all the probable wants of the port for some years to come. A branch railway, which delivers and takes up passengers and cargo in a covered station close to the moorings of the P. & O. steamers, connects the whole with Suez, running along a raised stone-faced embankment which also supports a good carriage road. As yet, no harbour dues are charged

to vessels using either the basins or the quays, but for the graving-dock, a charge is made of 70*l.* for the first, and half that amount for each subsequent day of its occupation. This covers nothing but the use of the dock, and assistance in placing the ship on the blocks; and, unless her own resources suffice for the repairs needed, both materials and skilled labour must as a rule be brought from Alexandria. The entrances to both the wet and dry docks are clear and easy, the former being accessible at all times of the tide, and, to vessels under steam, in any weather. Considerable inconvenience is occasioned by the retention of the Custom-house up at the town of Suez, to which all cargo for Egyptian use has still to be transported as of old in lighters for examination, only through goods and the mails being discharged into the railway trucks for conveyance to Alexandria, where they are re-shipped under Customs' supervision. The total cost of these works, including that of the dry dock, has already exceeded 1,400,000*l.*

LIGHTHOUSES.

In respect of these important aids to navigation Egypt now compares favourably with the best lighted seaboards of Europe. And here again, with one exception, the present reign is to be credited with the whole of the existing admirable system. At the death of Saïd Pasha the lighthouse at Alexandria, which has since received a new lantern and been otherwise improved, was the only structure of its kind on any part of the Egyptian cost, while an inefficient floating-light in the bay of Suez was the sole beacon on the western side of the Red Sea; there are now eight powerful lights on the Mediterranean coast, and seven on the Red Sea. Of the former, four serve the harbour and

bay of Alexandria—one, the fine 20-second revolving light on Ras-el-Teen Point, visible for twenty miles; close by, at the end at the breakwater, a red light, visible for six miles; a third on Marabout Island, at the western extremity of the bay; and, beyond that, the fourth, also a fixed first-class light, in the Arab's Gulf. Eastwards, off Rosetta, is a fine flashing red-and-white light; at Cape Bourlos, a fixed white one; off Damietta, a flashing white light; and at Port Saïd, in addition to the small coloured beacon at the extremity of the two harbour-moles, a first-class electric 20-second light, visible twenty miles off. On the Red Sea, besides the white light at the entrance to the Suez Canal and the floating beacon in the Suez roads, a powerful eighteen-mile light has been erected off that harbour; a second, a fixed white light, visible fourteen miles off, on Zafarana Point, fifty miles south of Suez; the third, a similar but more powerful light, on Ras Gharib, fifty miles still lower down; a fourth, on Jubal Island, at the mouth of the Gulf, is a 60-second revolving light, visible for eighteen miles; a fifth, on the Dædalus reef, nearly in the middle of the Red Sea, in lat. 24° 55′ N., is a fixed second-class light, visible fourteen miles off; a sixth, of similar power, at Souakim; and a seventh at Berbera, on the Indian Ocean. On the eastern coast also, below Suez, a new light has been erected at El-Wedge, the quarantine station for vessels arriving from Red Sea ports. The total cost of the fourteen of these lights erected during the present reign is estimated at 187,964*l.* The whole are of the best European construction, and their keepers are for the most part Englishmen. The light-dues—of 2p. (4·922d.) per ton up to 800 tons (Turkish measurement), and of 1p. per ton beyond that capacity—afford, since the great increase in the traffic

through the Red Sea consequent on the opening of the Suez Canal, a revenue considerably in excess of the cost of the service, and might therefore be reasonably readjusted in favour of Canal-going ships, which pay this high rate on both their upward and downward voyages, whereas vessels from the southward, which proceed no farther than Suez, and return thence, pay only once for the double trip. A reduction of 5 per cent. is made in favour of regular postal steamers, and men-of-war are wholly exempt, as are also small craft of less than ten tons burthen. Few, however, will grudge the Government a liberal margin of profit, as on perhaps no part of the coasts of Europe is the light service more efficient than on these northern and eastern shores of Egypt—a result which is chiefly due to the energy and intelligence of our countryman, McKillop Pasha, under whose superintendence most of the lights were erected, and who now manages the whole.

TELEGRAPHS.

Like its railways, the telegraphs of Egypt are mainly the creation of the present reign. At the death of Saïd Pasha only six short lines, measuring in all about 350 miles, were in existence. There are now, including three private lines worked under concessions granted by the Government, thirty-six, spanning more than 5,500 miles, with nearly 10,400 miles of wire. It is true that, except in Lower Egypt, this great extension of the system represents rather increased administrative facilities than a proportionate growth in commercial and general correspondence; but even in the Middle and Upper provinces the statistics of the department show an increase of nearly 34 per cent. in the non-Government traffic during 1875 as compared with that of 1869, while below Cairo the

development has been much greater. Subjoined is a list of the present network :—

Lower Egypt.

	No. of Wires.	Mileage.
Cairo to Alexandria	7	142
Cairo suburban lines	2	32
Cairo to Helwân	1	18
Cairo to Galioub and the Barrage ...	2	17
Cairo to Teh-el-Barood	1	71
Cairo to Gaza (Syria) *viâ* Benha ...	2	288
Cairo to Suez	1	154
Cairo to Mansourah, *viâ* Galioub ...	2	96
Aboukebir to Salahieh	2	25
Benha to Mit-birra	2	9
Benha to Zagazig and Suez	2	123
Tanta to Talka and Damietta	2	73
Tanta to Zifta	2	33
Tanta to Dessouk	2	47
Tanta to Shibin-el-Koom	2	19
Nashart to Kafer Sheikh	2	10
Alexandria suburban lines	2	12
Alexandria to Rosetta	2	46
Damanhour to Atfeh and Rosetta ...	2	50
Port Saïd to Suez (direct)	1	96
Port Saïd to Kantara	1	26

Middle and Upper Egypt.

Cairo to Assiout	3	239
Wasta to the Fayoum	2	25
Bibba to Rhoda...	2	91
Assiout to Abou Teck	2	5
Assiout to Assouan	2	300
Kenneh to Cosseir	2	164
Assouan to Khartoum[1]	2	1,012
Berber to Kassala	1	407
Kassala to Massowah	1	447
Kassala to Souakim	1	300
Khartoum to Kordofan (El Obed) ...	1	407
Khartoum to Messalamia and Sennaar	1	162

[1] This great line, which through much of its course traverses deserts

The system thus outlined supplies telegraphic communication to every considerable town, and even to most of the larger villages in Egypt proper, and, southwards, to all the chief Government and trading stations from Assouan to the countries bordering the Blue and White Niles. The whole network is divided into eight "sections," the first of which includes all stations in Lower Egypt, the second those between Cairo and Assiout, the third between Assiout and Esneh, the fourth between Esneh and Wady-Halfa, the fifth between Wady-Halfa and Dongola, the sixth between Dongola and Berber, the seventh between Berber and Khartoum, and the eighth between Khartoum and Massowah. The tariff charge for a single message of twenty words, including the address, is 10 pias. for each section. Arabic is the language employed on all lines south of Cairo, but in Lower Egypt English, French, Italian, and Turkish are also in common use. Except for the special railway wires, which are worked by the old needle instrument, the Morse ink-recorder is the apparatus generally employed. This service is also under English management, with Mr. George as director, and Mr. Gisborne as engineer.

Besides these Government lines, the Eastern Telegraph Company has been allowed to construct and work two lines between Alexandria and Suez for its through Red Sea service, one *viâ* Cairo and the old desert route, and the other *viâ* Benha and Zagazig, both double-wire lines, and respectively 233 and 229 miles in length. The Suez Canal Company also works, for the purposes of its own administration, a line along the Canal 96 miles long. Externally Egypt is in telegraphic communication with Europe by the land line through Syria and

and forests previously unexplored, was constructed by Mr. Hartley Gisborne and a small assistant staff of English engineers.

Asia Minor to Constantinople, and by the Eastern Company's cables—(1) from Alexandria to Constantinople *viâ* Candia, Rhodes, and Smyrna; (2) from Alexandria *viâ* Candia and Zante to Otranto; (3) from Alexandria to Italy *viâ* Malta and Sicily; (4) from Alexandria to England, *viâ* Malta, Gibraltar, Lisbon, and Porthcurno (Cornwall); and (5) from Alexandria to France, *viâ* Malta, Bona, and Marseilles; and with India, China, the Straits, Australia, and New Zealand, by the same Company's Red Sea and extreme eastern cables. Another submarine line to Europe is also projected—from Alexandria *viâ* Candia and the Piræus.

BRIDGES.

Besides nearly 500 smaller works of this class built over various canals, six or eight large ones have also been constructed during the present reign. The most important of these is the monumental iron structure over the Nile at Cairo, which has replaced the old rickety ferry that a dozen years ago contributed so much to the picturesqueness and the inconvenience of an excursion to the Pyramids. This splendid bridge spans the river from Kasr-en-Nil to Gizereh with a level macadamised roadway, 40 metres wide and 406 in length. Its first section on the Cairo side opens on a central pivot, and twice in the twenty-four hours affords a double up and down water-way 32 metres wide, with an average depth of 10 metres; the remainder of the bridge consists of seven spans, the first and last of which are 46 metres, and the intermediate five 50 metres long, the whole resting on massive circular piles, foundationed on concrete. This fine work was completed in February, 1872, by the French company of Fives-Lille, at a cost of 108,000*l.*

Gizereh, as its name imports, was formerly an island,

but some years ago the passage between it and Ghizeh, on the Libyan bank of the river, was closed by a broad embankment, and the entire stream turned into the eastern channel. But the great volume of water thus forced against the right bank gradually so encroached upon it as to threaten to undermine the river front of Boulak, and to prevent this the Khedive decided on re-opening the whole passage. With this view, another bridge has been constructed over its dry bed, which is to be cleared out and the river re-admitted. This, which is also of iron, is 180 metres long, and, like the larger one, is planned to open for the passage of river craft, but, whether owing to the subsidence of the foundations or some defect in the construction, this part of its intended use is not likely to be realised, as the swing section is already so dislocated as to be practically locked. The work, which was constructed by an English firm, cost 40,000*l.*, and was also completed in 1872. Two other handsome but smaller bridges, which also open, have been built over the Ismailïeh canal—one not far from the point in which it taps the Nile, and the other near the railway station—a fifth at Abbassieh, another at Foueh nearly opposite Atfeh, where the Mahmoudieh canal joins the Rosetta branch, and two over the latter canal itself at Alexandria. These are all substantial if not imposing structures, and would compare not unfavourably with similar works of their class in Europe.

There remains to be noticed the SUEZ CANAL, but its surpassing importance entitles it to a separate chapter.

CHAPTER XII.

THE SUEZ CANAL.

This Work a Source of Permanent Loss to Egypt—Its Political Compensations—Ancient History and Variations of the Scheme—Contemplated by Bonaparte—Conflicting Surveys—Opposed by Stephenson—Cairo-Suez Railway Constructed as Substitute—M. de Lesseps—First Concession from Saïd Pasha—English Opposition—Formation of Company—Commencement of Work—Fresh-Water Canal—Withdrawal of *Corvée* Labour—Reference to Emperor Napoleon—His Excessive Award—Further Financial Incidents—Description of the Canal—Economy of Distance—Seven Years' Traffic—Proportion of Flags—Dispute as to Dues—Its Settlement—Capital Account—Cost to Egypt—Compensations—Report of Directors for 1876.

THIS greatest of modern Egyptian public works not merely transcends all the rest in magnitude and cost, but differs from the whole in that, while the others are or will be reproductive and profitable to the country, it represents a distinct and more or less permanent loss. Not only has it cost the Treasury, in all, more than 17,000,000*l.*[1] in money outlay, but it has diverted from the Egyptian ports and railways a large and increasing transit traffic of great revenue value, against which nothing but some trivial Customs dues will be received until the net earnings of the enterprise, after payment of debenture charges and statutory interest on shares, leave a surplus of profit, out of which, only, the Government is entitled to a fractional royalty of 15 per cent. It has, indeed, some political compensations in the closer *rapport* with Europe into which it has brought the country and its ruler, and as an enterprise of cosmopolitan importance

[1] Less the 4,000,000*l.* recouped by the sale of the shares to the British Government.

and value, it will historically illustrate the reign of the Prince to whose munificence its success is mainly due; but so far as Egypt itself is concerned it may be doubted if these acknowledged advantages have not been dearly bought.

The idea of the great scheme which has thus benefited the trade of the world at the expense of Egypt is as old as the Pharaohs. According to Strabo, water communication between the two seas was first opened by Sethi, a king of the nineteenth dynasty (*circ.* B.C. 1400), who cut a canal fifty-seven miles long from Bubastis, near the modern Zagazig, on the Pelusiac branch of the Nile, to Heröopolis, at the head of the Bitter Lakes, which then formed the northern extremity of the Gulf of Suez. Herodotus, on the other hand, post-dates the attempt by nearly eight centuries, and credits it to Necho II., whose channel followed the same line, which is also nearly that of the modern fresh-water canal. Fears, however, that the higher level of the Red Sea would result in a general inundation, led to the abandonment of this work after—if the historian does not exaggerate—120,000 men had perished in its construction. A century later, Darius, the son of Hystaspes, completed what Necho had begun, and added a further link of ten miles, by clearing a navigable passage through the low sandy isthmus which had in the interval formed between the Heröopolite Gulf and the Red Sea. Traces of this latter section are still distinguishable in the neighbourhood of Shaloof, near the southern end of the Bitter Lakes, and the fresh-water canal follows its course for some distance between that point and Suez. But the communication thus established involved the transhipment of cargo at Heröopolis, and to remedy this inconvenience Ptolemy Philadelphus (B.C. 285) joined

the Nile canal with the Heröopolite Gulf by means of a lock and sluices, and where the short canal from the latter entered the Red Sea, founded Arisnöe, near the site of the modern Suez. History is silent as to the fortunes of the channel during the next two centuries; but the failure of Cleopatra's ships to escape through it into the Red Sea (B.C. 31), shows that it had then again become unnavigable, and it is doubtful whether Trajan or Adrian (A.D. 98–138) was the next who endeavoured to restore the line of communication. In the long historic interval thus spanned, the Nile had almost deserted its Pelusiac branch, and the Roman engineers therefore tapped the river above the Delta at Babylon (Old Cairo), and carried a new cutting thence down into the old Bubastite canal, which they also cleared out and restored. But the extent of what may be called the Upper Nile trade with the Red Sea through Berenice and Myos Hormos seems to prove that this canal transit was never very efficient during the Roman occupation; and the inference is supported by the unnavigable state in which Amrou, the Arab conqueror, found the Babylon section in A.D. 622. This he re-opened, and for a time he managed to maintain communication with the Red Sea; but in less than a century and a half the unconquerable sand had re-asserted its dominion, and thence on, for more than a thousand years, water-way between the two seas was closed.

Next in the historic order of its promoters comes Bonaparte, who during the French occupation of 1798–1801 ordered a survey of the Isthmus, with a view to the construction of a direct ship-canal from sea to sea. His engineers, however, declared the Mediterranean to be thirty feet below the level of the Red Sea, and recommended instead a complicated fresh-and-salt-water

scheme which the forced evacuation of the country, shortly after, happily prevented any attempt to carry out. During the next thirty years the question continued to be agitated at intervals; but nothing definite was done till 1830, when Lieut. Waghorn, then engaged in the establishment of his overland route, again surveyed the Isthmus and found the level of the two two seas to be very nearly identical. The announcement of this fact called the attention of Mehemet Ali to an enterprise pregnant with such political advantages to Egypt, and he accordingly commissioned Linant Bey, the French engineer of the Barrage, to prepare the plan of a great ship-canal across the Isthmus at its narrowest point, from Tilreh (Pelusium) to Suez. This was done, but as M. Linant accepted the survey of Bonaparte's engineers in preference to that of Lieut. Waghorn, his scheme failed to secure the confidence of the Viceroy, and nothing further was done till 1846, when at the request of his Highness, England, France, and Austria appointed a Commission to solve, once for all, the problem of the sea levels. This Commission—on which Mr. Robert Stephenson represented our own Government—confirmed Waghorn's report, with the sole variance of finding a difference of five feet in the tidal levels of the two seas at the proposed termini of the canal. Another examination leading to similar results was made five years later; but Mr. Stephenson nevertheless pronounced against the feasibility of the canal, and his opinion—though at variance with that of M. Talabot, the French member of the Commission—being accepted by the Government and public of England, the railway from Cairo to Suez, which he recommended instead, was the result.

In the meantime, another mind had been occupied

with the scheme for nearly a quarter of a century. When Waghorn was advocating his own peculiar enterprise of an overland route, young Ferdinand de Lesseps was an *élève* in the French Consulate at Cairo, and, interested in our countrymen's settlement of the sea levels, he conceived the idea of accomplishing the great work which Napoleon had abandoned. For four-and-twenty years of active official life the idea kept firm hold of his imagination, until, being again in Egypt in 1854, he developed his plan to the then Viceroy, Saïd Pasha, and obtained from him a preliminary concession for a ship-canal across the Isthmus from a point near Pelusium to Suez. In the following year this project was submitted to another international Commission, which advised that, instead of striking the Mediterranean at Pelusium, the Canal should be carried through Lake Menzaleh, and enter the sea some seventeen miles farther west, where a deeper approach would be available. This and some other modifications having been accepted, the final concession for the work was signed by the Viceroy on January 5, 1856. Of the opposition which had already begun on the part of Lord Palmerston and the English press it is needless to speak, for is it not all written in Blue Books and journals innumerable? This, however, rather stimulated than discouraged M. de Lesseps, while it also stirred up the national feeling of France, and with its help enabled him, in 1858, to launch his "Compagnie Universelle du Canal Maritime de Suez," with a capital of 8,000,000*l.* in 20*l.* shares, on nearly every Bourse in Europe. Rather more than half of this amount was subscribed for—the greater part in France—and eventually, in 1860, Saïd Pasha was induced to take up the remainder, amounting to 3,500,000*l.* Thus encouraged, and disregarding the

withheld consent of the Porte—which was not finally given till 1866—M. de Lesseps and his little band commenced their historic work on April 25, 1859, by cutting a small trench in the narrow belt of sand on the northern shore between Lake Menzaleh and the sea, where now stands Port Saïd. This was followed soon after by the establishment of working encampments at various points across the Isthmus, and by the restoration of the Wady canal from Zagazig to Lake Timsah, to provide a fresh-water supply for the thousands who were to be employed on the work. The initial difficulties were, however, so great, that by the end of 1862 only a narrow channel had been made from the Mediterranean to Lake Timsah—less than half-way across—and the fresh-water canal extended from Ras-el-Wady to the same point, whence it was carried, closely parallel to the ship-canal, on to Suez in the following year, when the Government also began the canal from Boulak, which, by joining the Wady canal at Ter-el-kibeer, now completes the fresh-water communication between Cairo and Suez.

At this point arose a difficulty which for a time threatened to suspend, if not altogether to stop, the works. By the terms of the concession Saïd Pasha had engaged to furnish by *corvée* four-fifths of the workmen required, the Company agreeing to pay them at the rate of about two-thirds the price of such labour in Europe, besides providing them with rations and shelter. The objectionableness of this stipulation had from the first been urged on the Porte by the English Government, and soon after the death of Saïd Pasha, in January, 1863, Sir Henry Bulwer, then ambassador to the Porte, during a visit to Egypt pressed it strongly on the present Khedive. The impolicy of thus drafting off 20,000 fel-

lahs monthly from their proper work at home was made clear to Ismaïl Pasha, and accordingly, in the beginning of 1864, this large contingent of forced labour was refused. The political inexpediency of a foreign Company being allowed to hold, with almost sovereign rights, the wide belt of land along the Canal conceded by Saïd to Lesseps, and of its owning absolutely the fresh-water canal, was at the same time recognised by his Highness. By consent of the parties, the difficulties arising on these various points were at length, in 1864, submitted to the arbitration of the Emperor Napoleon, whose award in July of that year gave the Company the enormous indemnity of 3,360,000*l.*—being 1,520,000*l.* for the withdrawal of the fellah labour, 1,200,000*l.* for the resumption of the land along the Canal, except two hundred metres on each bank, and 640,000*l.* for the fresh-water Canal from Ras-el-Wady to Suez—the whole to be paid in sixteen instalments of 12 per cent. Treasury bonds falling due between 1864 and 1879. To this was added, in 1866, a cash payment of 400,000*l.* for the re-purchase of the Wady domain, which the Company had bought five years before from Saïd Pasha for 74,000*l.* By a subsequent convention, the term for the payment of the indemnity awarded by the Emperor Napoleon was shortened by ten years, and it was agreed that the whole sum should be paid by 1869, which has since been done.

Thus financially reinforced, the Company was enabled to replace by machinery the hand labour taken from it by the stoppage of the *corvée*. Powerful steam dredges excavated more quickly, and in the end more cheaply, than the previous army of fellahs; and with the help of a still large force of European labourers and such native volunteers as could be procured, the work pro-

ceeded without interruption till the end of 1864, when financial difficulties again for a while checked its progress. These were, however, got over by a debenture loan for 6,666,660*l.*, issued at 60 per cent., and redeemable at par in fifty years by lottery drawings, with prizes amounting to 40,000*l.* a year. To this was added another issue for 1,200,000*l.* in 1869—secured on twenty-five years' coupons of the Government shares, from January, 1870—when an arrangement was come to with the Government by which, for the further sums of 800,000*l.* and 400,000*l.*, the Company surrendered its remaining rights and privileges in connection with the fresh-water canal, and the riverain desert still belonging to it, and sold to the Government all its establishments on the Isthmus, its quarry and harbour at Mex, near Alexandria, and its workshops at Damietta and Boulak. The Government being unable at the time to pay this amount, it renounced for twenty-five years the coupons of its shares,[1] and on the security of these the money was raised by a loan which is now being redeemed by the interest accruing upon them. The net capital of the Company had thus swelled from its original amount of 8,000,000*l.* to, in round figures, 17,000,000*l.*, which other various payments received during the progress of the work further raised to a total of nearly 19,000,000*l.*, the approximate final cost of the works, including payment of interest during construction. A glance at the details of the scheme will show that its difficulty and magnitude were fully commensurate with this great expenditure.

The total length of the Canal from sea to sea is eighty-six miles, with a varying width at the water-line

[1] These had originally been 177,642, but had at this date been reduced to 176,602.

of 328 feet where the banks are low, and of 190 feet in deep cuttings where they are high, depth twenty-six feet, width at the bottom seventy-two feet, with a slope of bank near the water-line of one in five, and near the base of one in two. With reference to the width of water-line and nature of the soil traversed, the whole channel may be divided into nine sections—(1) The low marshy plain extending for ten miles from the roadstead of Suez to the plateau of Shaloof; in this section the water-line is of the full width, and much of the soil towards the bottom of the channel is of a mixed stiff clay and half-formed stone which proved very difficult of excavation when worked through in 1868 and 1869. (2) The deep Shaloof cutting of five miles, in which the water-line is of the reduced width, and the soil sandy at top, but like that of the previous section strong and tenacious below; a deep layer of rock was encountered here in 1866, of which no less than 52,000 cubic yards had to be blasted and cleared away. (3) The Bitter Lakes, supposed to have anciently formed the Heröopolite Gulf, the waters of which, after being gradually cut off from the Red Sea, evaporated and left two large depressions of varying depth, but both much below the old sea-level. It is hereabouts that modern criticism places the scene of Pharaoh's overthrow during his pursuit of the Israelites. The only excavation done in this long section of twenty-five miles was a cutting through the narrow neck of soil between the two basins, and short entrances north and south; but the work of filling the vast expanse with water was one of considerable time and labour. This was begun in March, 1869, by letting in the waters of the Mediterranean, which

had already filled Lake Timsah, eight miles north, and advanced through the Canal to the foot of the enormous weir destined to regulate their flow into these southern basins. A stream of nearly 5,000,000 cubic metres was then poured in daily, and three months later a still larger weir near Shaloof admitted the waters of the Red Sea into the southern portion of the lake at the rate of more than 10,000,000 cubic metres a day. Altogether, about 1,900 million cubic metres of water from the two seas were required to fill these Bitter Lakes. The course of the Canal through this great sheet of water is marked by a double line of buoys, forming an avenue 130 feet wide, and lighthouses at each end of the larger lake further assist navigation. (4) This short section of two miles runs through the low ground between the last and the heights of the Serapeum—so named from some supposed remains of a temple of Serapis found about the centre of the plateau. The water-line of the Canal is here full width, and the soil cut through is similar to that south of the Bitter Lakes. (5) This includes the Serapeum and Toussoum cuttings, six miles long, and in which the water-line is of the reduced width throughout. The soil here again is sandy on the surface and mixed clay and rock at the bottom. It was at the southern end of the Serapeum cutting that the dredges at the last moment encountered the ledge of hard rock which nearly compelled postponement of the opening of the Canal in November, 1869. (6) About half a mile north of the Toussoum cutting Lake Timsah is reached, through which the channel next runs for five miles. This, though supposed to have been originally an extension of the Heröopolite Gulf, has in all historic times been a fresh-water lake fed from the Nile; but owing to the abandonment of the easternmost branches of the

river, it had long ago dried up into a mere morass, the bottom of which was some twenty-two feet below the sea-level. In December, 1866, a weir similar to that afterwards employed for the Bitter Lakes was used to fill it with water from the Mediterranean, and the operation—involving the in-flow of nearly 100,000,000 cubic metres of water—was completed in little more than four months. Dredging then deepened the channel required for the Canal, as also a large area in the centre, to serve as a harbour. The flourishing town of Ismaïlieh, forming the half-way station on the Canal, has since grown up on its western bank. (7) The heights of El-Guisr, through which this section is carried for six miles, form the highest point of the Isthmus, being about sixty feet above the sea-level, but as the soil throughout was for the most part sandy, the work was comparatively light. (8) This first runs a short way through an offshoot of Lake Ballah—one of a series of shallow lagoons—and then enters the cutting of Ferdaneh, beyond which it passes through Lake Ballah itself, and next traverses the low sand-hills of Kantarah, over which and a ferry at this point runs the route into Palestine. (9) About a mile beyond Kantarah the Canal enters the great swamp into which Lake Menzaleh shallows eastwards, and runs through it in a straight line of twenty-three miles to Port Saïd. The soil throughout this final section is mostly light clay, and the work was mainly done by dredging. The water-line is here full width, and the banks are but slightly above the level of the lake and the Canal. Shortly before reaching Port Saïd the channel opens out to a width of nearly 100 feet, and passing the port and town on its western bank, debouches into the Mediterranean between two enormous moles of concrete masonry re-

spectively 2,726 and 1,962 yards long—a fitting terminus for this colossal work.[1]

After more than ten years' labour, the expenditure of a capital which then considerably exceeded twice the whole annual revenue of Egypt, and the display of an energy and perseverance on the part of its chief promoter that formed not the least heroic feature of the undertaking, this new Bosphorus between Asia and Africa was opened for traffic on November 17, 1869[2], amid a series of splendid *fêtes* given by the Khedive, at which all nations may be said to have assisted. The presence of the Empress of the French and the Emperor of Austria, of half a dozen royal princes, statesmen, ambassadors, *savants*, and other celebrities beyond count, besides thousands of less distinguished visitors, and representative squadrons from every navy in Europe, rendered the occasion a veritable "triumph" to the great Frenchman whose name history will indissolubly connect with the work, and to the sovereign whose generous co-operation contributed so largely to its success. In all, forty-eight ships took part in the procession, which halted on the first evening at Ismaïlieh, and completed the voyage to Suez on the following day. The channel still required deepening at a few points, but was immediately available for vessels drawing 18 feet; and, as another illustration of the irony of history, the first ship

[1] The huge blocks of which these breakwaters were formed measured twelve cubic yards, and weighed twenty-two tons each. They were made on the spot, of two-thirds sand, dredged from the harbour, and one-third hydraulic lime from Theil, in France, mixed with salt water. Since the opening of the Canal it has been found necessary to lengthen the eastern mole by 600 metres, at which further distance hard ground is reached at a depth of five or six fathoms.

[2] Water transit between the two seas had, however, been opened for small craft in 1865, by means of the channel then dug from Port Saïd to Lake Timsah, and from the latter by the fresh-water canal to Suez.

that passed through and paid dues after the formal opening flew the English flag.

As the central depth of the Canal is too narrow to allow large vessels to pass abreast, a series of *gares* or sidings, at intervals of five or six miles, temporarily meets the difficulty, and affords a clear fair-way to the first comer. Later, as the traffic develops, it will probably be necessary to increase these, if not to widen the whole channel of the Canal.

The value of this great work to the commerce of the world will be sufficiently indicated by the saving of time and distance effected by it as compared with the route round the Cape. Thus, by the latter, the distance between England and Bombay is 10,860 nautical miles, while by the Canal it is only 6,020 miles, representing a saving of 4,840 miles; from Marseilles to Bombay the distance by the Cape is 10,460 miles, by the Canal 4,620 miles, or a saving of 5,940 miles; from St. Petersburg to Bombay is by the Cape 11,610 miles, by the Canal 6,770 miles, a saving of 4,840 miles; and from New York to Bombay, *viâ* the Cape, 11,520 miles, by the Canal 7,920 miles, a saving of 3,600 miles. How rapidly the traffic attracted by the economy of distance thus effected has developed is shown by the following tabular return of the shipping which has passed through the Canal, and of the Company's receipts, during the seven working years since its opening:—

Years.	Vessels.	Tonnage.	Receipts in Francs.
1870	491	436,618	5,159,327
1871	761	761,875	8,993,732
1872	1,082	1,439,169	16,407,591
1873	1,171	2,085,270	22,897,319
1874	1,264	2,423,672	24,859,383
1875	1,496	294,708	28,879,734
1876	1,457	3,072,107	30,728,925 [1]

[1] These sums represent only the amount of tonnage dues collected, exclusive of other miscellaneous revenue from the sale of land, rents, &c.

The comparatively small ratio of increase in the figures of last year over those of 1875 in no way indicates that the limit of development has been nearly reached, but is explained by the general depression of trade during 1876, and especially by the fall in the price of silver, which disturbed the European exchanges and severely affected commercial intercourse with India during the year. Of the whole 7,522 vessels which have passed through the Canal since its opening, 74·16 per cent. have been British, 9·21 French, 4·35 Dutch, 3·47 Austrian, 2·63 Italian, 2·9 Spanish, and 1·64 German, the remainder being divided among eleven other nationalities. Thus, roundly, three-fourths of the whole tonnage passing through the Canal sails under the British flag.

While the growth of traffic evidenced by these figures has not as yet quite realised the hopes of the promoters of this great work, there is no reason to doubt that it will still further greatly develop; and that, over and above all debenture charges, the net earnings of the Company will henceforth not merely pay the full statutory interest of 5 per cent. on its shares, but leave an annually increasing margin of profit to be divided under the terms of its concession.[1] Already, therefore, this once discredited property may be pronounced nearly as great a financial as it is an industrial success.

By the terms of the original concession the transit charge was fixed at a maximum of 10 francs "*par tonneau de capacité,*" and 10 francs per passenger, in addition to pilotage, anchorage, and some other minor dues, and from the opening of the Canal, in November, 1869, till

[1] Of this surplus the Egyptian Government takes as a royalty 15 per cent., 10 per cent. goes to the founders, 3 per cent. to the share sinking fund, 2 per cent. to a pension fund for the employés, and the remaining 71 per cent. to the shareholders.

the summer of 1872, this tariff was levied on the net registered tonnage of all vessels, as settled by their respective national systems of measurement. As, however, the revenue thus realised was insufficient to pay a dividend, in the spring of 1872 the Company gave notice that, from and after July 1st of that year, all dues should be charged on gross, and not registered tonnage. The change, which involved an increase of nearly 55 per cent. on the old rate, was at once challenged by the Messageries Impériales, but, after considerable litigation in the French courts, the action of the Company was upheld, and the new tariff continued to be enforced. At the instance of the British shipowners engaged in the trade, the matter was then taken up by our Foreign Office, and after some diplomatic negotiation an International Commission, composed of delegates from twelve maritime Governments, was appointed and met in Constantinople in October, 1874, to consider the question, the increased dues being in the meantime paid under protest. Three months later the Commission reported—negativing the right of the Company to substitute gross for net tonnage; but in consideration of the sacrifices incurred by its shareholders, it recommended a temporary surtax of four francs per net ton register on vessels measured otherwise than on the English system, and of three francs per ton on those whose net tonnage was settled by this method. The basis thus agreed on was formally approved by the Porte as suzerain of the Canal, and the Company was notified to apply the new scale from and after April 28, 1874. M. de Lesseps protested, and threatened to close the Canal, but on warning from the Khedive that in the event of any such attempt the works would be forcibly occupied and administered by the Egyptian Government, he yielded; and thence, until

February, 1876, the dues were levied according to the scale fixed by the Commission, except in the case of men-of-war and troop-ships of all nations, which pay only the original rate of ten francs per net ton register. In the latter month, however, it was further arranged that this reduction should, instead, be effected as follows:—Half a franc during the present year, a second half franc in 1879, and a similar amount yearly till 1884, when the surtax will wholly cease. The Company at the same time undertook to spend 40,000*l.* a year in the maintenance and improvement of the Canal.

The next and most important incident in the history of this great work was the purchase by the British Government, in November, 1875, of the Khedive's 176,602 shares for 4,000,000*l.* This stroke of policy at once recouped to Egypt a considerable instalment of her outlay in the enterprise, and added political advantages worth to the Khedive and his dynasty at least the balance of its cost. The operation represented, in effect, a loan to his Highness at the low rate of 5 per cent. for nineteen years, on the security of an asset of no immediate money value, and committed our Government to an interest in Egypt from which only the most profitable results can accrue to the country and its ruler, while for the Canal the transfer implies a future grand and assured beyond the hopes even of M. de Lesseps.

It remains to note the present financial position of this great scheme, and what has been its money cost to Egypt. The chief items of its capital and bonded debts have been already mentioned, but they may be re-stated as follows:—

Original shares, 400,000 of 20*l.* each	£8,000,000
Debenture loan of 1868, "obligations" issued at 12*l.*, but redeemable at 20*l.* in 50 years, by lottery drawings, with prizes worth 40,000*l.* a year ...	6,666,690
Loan of 1871, bonds issued at 4*l.* each, and redeemable at 5*l.* in thirty years	600,000
Coupon certificates issued in 1874, to fund 3½ years' unpaid interest, and redeemable in 40 years from 1882	1,400,000
	£16,666,660[1]

This large total, however, represents only about 12,000,000*l.* of net money received by the Company, while the actual cost of the Canal was about 17,518,729*l.*; but the balance of nearly 6,000,000*l.* having been derived chiefly from indemnities paid by the Egyptian Government, forms no charge upon revenue. The actual interest and sinking fund annuities amount, therefore, to only 818,400*l.*, which will be reduced as the loans are redeemed.

The cost of the scheme to Egypt admits of equally precise statement:—

To 177,642 shares originally subscribed for by Saïd Pasha, but mostly paid for by the present Government	£3,552,840
Paid under award of the Emperor Napoleon, to compromise original grant of forced labour, to re-purchase land along the Canal, &c. &c.	3,360,000
Paid for the re-purchase of the Wady domain, which had been bought by the Company from Saïd Pasha for 74,000*l.*	400,000
Paid for the Company's relinquishment of exemptions from customs dues and its right of free navigation on the fresh-water canal; of its right of fishery	

[1] As this account debits the Company with the whole of the share capital, we exclude from it the *délegation* loan of 1,200,000*l.* issued in 1869 on the security of the Khedive's coupons, and to the redemption of which in 1894 the proceeds of these are till then being applied.

in the ship canal and lakes; for the purchase of its various establishments along the Isthmus; its quarries at Mex, workshops at Boulak and Damietta; and of all special privileges whatever beyond property in and the right of working the maritime Canal	£1,200,000
Paid for the work done by the Company on the fresh-water canal between Cairo and the Wady, and for its relinquishment of certain claims in respect thereof	424,927
Cost of further works to complete this canal from the Wady to Suez	815,800
Cost of various missions to Europe in connection with the ship Canal, litigation with the Company, and of fêtes at the opening of the Canal	1,011,153
	£10,764,720
To interest on the above sums from their respective dates to September, 1873	6,663,105
	£17,427,825

Of this large total nearly 5,500,000*l.*, it will be seen, was disbursed in various payments beyond the share capital; or, if we add the interest—averaging 10 per cent.—on the whole, it may be roundly said that while the Government paid in cash to the Company nearly two-thirds of all the money spent on the Canal, its gross outlay in connection with it amounted to within a trifle of the entire cost of the work. Nor is even this the full measure of its heavy cost to the country. As already remarked, it has diverted from the native harbours and railroads a large and profitable transit traffic from which, for years to come, the Treasury will derive little beyond some trifling Custom-dues. Still, heavy as have been the financial sacrifices it has entailed, the political gains from it have been great, and material compensation is only deferred. Its importance to the trade of the world has given Egypt a definite place in the European con-

cert, and—unless otherwise disposed of in the meantime -seventy-six years hence the whole property will lapse to the Government, a splendid reversion which, it may safely be predicted, will then be worth many times its present market value. Even already, too, the elasticity of Egyptian trade and industry has recouped to the Treasury most of the loss occasioned by the diversion of the overland traffic; and although this latter can for the future be of little direct revenue benefit, its effect will in time be to create a vigorous commercial activity throughout the Isthmus, which, with the aid of the existing railway and fresh-water communications, cannot fail to spread inwards and contribute to the general wealth of the country.[1]

[1] The recently-issued report of the directors for 1876 announces a gross total of revenue for last year of 31,143,762 frs., and an expenditure of 17,244,658 frs., against, respectively, 30,827,762 frs., and 17,798,408 frs. for 1875, leaving 13,902,655 frs. as gross profits for the year. Of this amount, after payment of the various loan charges and the statutory interest and reserve, there remained available a net sum of 2,002,913 frs. for distribution as royalty, in the proportions mentioned *ante* in the foot-note to p. 276. The report further states that during the first five months of the present year 766 vessels passed through the Canal, as against 692 during the corresponding period of last year.

CHAPTER XIII.

JUDICIAL REFORMS.

The Capitulations—Their Abuse in Egypt—Resultant Scandals—First Action of the Government for their Reform—Memorandum of Nubar Pasha—Negotiations with the English and French Governments—Appointment of an International Commission—Its Favourable Report—Opposition of the Porte—French Resistance—Assent of the Other Powers—Inauguration of the New Courts—Their Organisation and Jurisdiction—Great Success of the Reform—Its Effect on the Future of Justice in Egypt.

THE subject of this chapter ranks first among the many administrative improvements effected in Egypt since the death of Mehemet Ali, and politically is second in importance only to the change in the succession and the promotion of the Viceroy to the rank of Khedive. For the first time in Egyptian history it inaugurates a reign of LAW, limited as yet in its jurisdiction, but preparing the way for a much larger measure of reform, which shall protect from executive abuse both natives and foreigners as neither have ever been protected before.

One of the worst consequences hitherto of the relation of Egypt to Turkey has been its common subjection to the Capitulations between the Porte and the Christian Powers, in virtue of which the latter have jurisdiction over their own subjects within the Ottoman dominions. The original purpose of these conventions—the earliest of which dates from Mahomet II.'s confirmation of the privileges enjoyed by the Genoese traders under the Lower Empire—was to protect foreigners adventuring into the then perilous fields of Turkish commerce from

oppression by the native authorities; and, with this view, during the next couple of centuries a body of further immunities and concessions was granted by the successive Sultans, which conferred on aliens the right of trading freely throughout the empire, subject only to such Customs duties as might be fixed by treaty; protected them from arbitrary taxation; ensured the inviolability of their domicile; entitled them to have commercial disputes between themselves settled by their own Consuls; and secured the protecting presence of these functionaries, or of their dragomans, at either civil or criminal trials to which their countrymen might be parties before the native tribunals. Valuable and necessary as these privileges were 200 years ago, when the Porte was shut out from the pale of European fellowship even more by its barbarous system of Government than by voluntary isolation, it must be confessed that by the sheer advance of civilisation, to say nothing of change in the balance of power, they have now lost much of their original justification. Not only have foreign ambassadors long ceased to be imprisoned in the Seven Towers, and their dragomans to be tripped up and bastinadoed at a nod from the Reïs Effendi, but Europeans of every rank and nationality are now nearly as safe from administrative abuse as they would be at home. In Turkey proper the sufficiency of this protection has been practically recognised by the foreign embassies, and, with rare exceptions, no attempt has been made to abuse it by carrying this extra-territorial jurisdiction beyond its treaty limits. The tendency of recent years has, indeed, been rather the other way—not merely to confine the privileges of foreigners to the strict letter of Capitulation right, but to bring them within the range of native authority to an extent which

would neither have been claimed or allowed half a century ago.

In Egypt, however, the case has been very different. There the consular prerogative had been so extended by successive usurpations that not only were the native authorities ousted of every scrap of control over foreigners, but the Government itself was forced to submit to consular jurisdiction for the prosecution of charges or claims against foreign criminals or debtors; the Capitulations had, in fact, been superseded by arbitrary usage, founded on abuses to which the force of things on the one hand, and the desire of the Viceroys to attract foreigners on the other, had given the weight of law—with the practical result of depriving the executive of all power, and the native population of all justice in their relations with Europeans. This state of things was, however, of quite modern growth. Down till the death of Mehemet Ali consular authority in Cairo and Alexandria was as limited as in Smyrna, Erzeroum, or Baghdad. But during the weak rule of his successors, Abbas and Saïd, a fashion of encroachment sprung up, which, even before the death of the latter in January, 1863, had in every matter relating to foreigners placed both the Government and its subjects at the mercy of some seventeen petty consular tribunals, all of which were independent of and more or less in conflict with each other. The practical outcome of such a state of things need hardly be described. In civil matters, it compelled an Egyptian farmer or merchant, with a claim against an Englishman, Frenchman, or other foreigner, to sue the debtor in his own consulate, and, in the usual event of losing his cause there, either to abandon his claim, or pursue justice through the tedious, costly, and uncertain course of appealing to the defendant's home

court anywhere in Europe. Nor was this all. The abuse had reached a point at which some of the consuls actually claimed jurisdiction over natives as defendants, and delivered judgments against them which, though as bad in law as they generally were in equity, were afterwards enforced by diplomatic pressure on the Government—which in its turn fared no better than its subjects. Not only was it also forced to follow a defaulting debtor or contractor into his particular consulate, with a minimised chance of success, but it was estimated that in the four years preceding 1868 consular "influence" extorted from it the enormous total of 2,880,000*l.* in satisfaction of claims without judicial sanction of any kind. Driven to bay by this Olympiad of spoliation, the Viceroy has since opposed a firmer front to these exactions; but it is notorious that down to the beginning of last year the Daïra, especially, continued to be annually squeezed of many thousands for which the claimants could plead no right that would be recognised by a European tribunal. The success of these demands was locally explained in a way that said more for the zeal than the disinterestedness of the official advocacy employed.

Nor was it only the natives and the Government who suffered from this abuse of the Capitulations in Egypt. In their dealings with each other the system worked almost as mischievously for Europeans themselves. Thus, a foreign plaintiff was compelled to sue his foreign debtor in the consulate of the latter, and as a rule his chances of success were as slight as those of the Egyptian reduced to a similar strait, and, equally, he had no ultimate remedy but the illusory right of appeal just described. A bill of exchange might, and often did, thus become the cause of as many actions, in as many different tribunals, and under as many different systems of law, as

there were parties to it, from the maker down to the last endorsee. How many and scandalous were the miscarriages of justice resulting from this state of things need not be said: the whole system was, in fact, a scandal and a denial of justice all round.

It was, however, in respect of criminal matters that this abuse of treaty privilege was carried farthest. In Turkey, the native tribunals still assert their right to try foreigners for all offences committed not only against subjects of the Sultan, but against other foreigners of a different nationality; and, as a rule, the right is exercised both in Constantinople and throughout the provinces. In Egypt, on the other hand, although the letter of Capitulation law is the same, the native authorities have for nearly thirty years past been unable to do more than arrest a foreign robber or murderer, caught red-handed, and deliver him over to his own consulate, where, through lack of technical evidence, or from other causes equally unfavourable to justice, the chances are at least even that he will escape punishment for his crime—and, this, too, in a country where it is not too much to say that at least 10 per cent. of its 90,000 or more of foreign inhabitants are the worst *mauvais sujets* of the Levant.

In 1867 such a state of things had at length become intolerable, and the Egyptian Government began a movement for its reform. The vices of the system were made the subject of a memorandum addressed to the Viceroy by Nubar Pasha, then Minister of Foreign Affairs, in which the writer forcibly described the effect of these abuses on both the social and material progress of the country, and suggested a scheme of reform for which he claimed that, while adhering to the spirit of the Capitulations, it would even add to the guarantees of

justice enjoyed by foreigners under their letter. The project was first submitted to the French Government, whose influence was then paramount in Egypt, but on being referred to a special commission of Paris lawyers and officials, it was, on their report, unfavourably received. With our own Government, however, the Egyptian Minister was more successful. Lord Stanley [Earl Derby], then Foreign Secretary, freely admitted that the abuses complained of were "as injurious to the interests of all parties, as they were certainly without warrant of any treaty engagement," and promised the cordial co-operation of Her Majesty's Government in the proposed reform, if the concurrence of the other Powers should be obtained. This general consent to consider the subject was not, however, given till the autumn of 1869, when, all initial difficulties having then been overcome, a Commission was appointed, consisting of British, French, Austrian, Prussian, Russian, and Italian delegates, who met in Cairo, under the presidency of Nubar Pasha, in October of that year. During the two previous years' negotiations the scheme first sketched by the Egyptian Minister had been so changed and extended as to have become virtually a new project, and, thus improved, it was now submitted to the Commission for acceptance or further modification. It proposed—(1) to substitute for the existing chaos of jurisdictions one sole authority, which should deal alike with natives and foreigners, and be vested in three Courts of First Instance, sitting respectively at Alexandria, Cairo, and Zagazig, and in a Court of Appeal sitting at Alexandria; (2) that a majority of the judges should in each instance be foreign lawyers, who should be paid by the Government, but not be removable by it; (3) that all these courts should admit Christian

evidence; and (4) that they should all have jurisdiction in real property as well as personal suits—the only reservation made being in respect of civil disputes between foreigners of the same nationality, which were to be left, as before, to the decision of their own Consuls.

After several sittings the Commission, with a view to more completely ensuring the independence and efficiency of the new judiciary, proposed various amendments to this version of the scheme, which were all accepted by the president. As regarded the civil jurisdiction, it recommended the establishment—(1) of a Court of First Instance, composed of five judges, three of whom should be foreigners; (2) a Court of Appeal with three native and four foreign judges; and (3) a Court of Revision, similarly instituted to the last. It was also agreed that the real control of all the mixed tribunals should be exercised by foreign vice-presidents, and that the law to be administered by the whole should be embodied in a compendious code based on European legislation; and, finally, that at the end of five years the Powers, in concert with the Egyptian Government, should be free to modify the new arrangement, to maintain it, or to revert to the old consular system.

With respect to the criminal half of the viceregal scheme, the Commission accepted this also in principle, and reported—(1) "That one single jurisdiction in matters of crime and police offences was necessary in the interests of all concerned; (2) that its introduction should be preceded by a full examination of the guarantees resulting from a complete legislation, comprising a Penal Code and preliminary rules; and (3) that the reform of civil justice and that of penal justice should be simultaneously introduced, or, at latest, that the penal jurisdiction should

come into operation one year after the civil and commercial courts have commenced functioning."

Having thus secured an international verdict in favour of the reform, the Egyptian Government lost no time in drawing up the Civil Code prescribed by the commission. This was done by harmonising such rules of Arabic jurisprudence as were not repugnant to European legislation with the chief provisions of the Code Napoléon—the result being a concise and easily administered body of law, which experience has already shown to be well adapted to the country and its mixed populations. The outbreak of the Franco-German war, however, stopped the negotiations, and it was not till the autumn of 1871 that they were effectively resumed. In the meantime the jealousy of the Porte had been excited, and when Nubar Pasha again pressed the reform on the attention of the Pera embassies, A'ali Pàsha, then Grand Vizier, interposed with a veto, on the plea that the whole measure was of imperial rather than of merely Egyptian concern. For the double reason, therefore, that the Khedive had not negotiated with the Powers through the Porte, and that the proposed scheme was not such as the Sultan's Government could accept for the whole empire, the Grand Vizier in effect declared all that had been done to be null and void. This high-handed action was, however, resisted by the British and Russian embassies, and after a while A'ali perforce allowed the negotiations to proceed, merely covering his retreat by requiring some trifling changes to be made in the details of the project as approved by the Cairo Commission.

The French Government now put forward a counter-scheme, which, while agreeing in the main with that of the Commission, proposed to suppress the Court of

Revision as a "*rouage inutile*," and to increase the staff of the Court of Appeal from seven to eleven members, of whom seven should be foreigners, and only four Egyptians, thus in effect swamping the native element altogether. The Austrian Government, too, refused to surrender its criminal jurisdiction, and most of another year was thus again lost in negotiations at Paris and Vienna. At length, in the spring of 1872, the basis of a general agreement was arrived at, the Khedive consenting to adopt the French amendments with respect to the Courts of Revision and Appeal, and also to limit for a year the criminal jurisdiction of the new tribunals to offences committed against the Courts themselves, or in obstructing their process. Some months later another Commission met in Constantinople to examine the provisions under which these limited criminal powers should be exercised, and the guarantees proposed by the Khedive being considered sufficient, this body also reported favourably of the whole scheme. But, although its delegates on both the Cairo and Pera Commissions had voted for the reform, the French Foreign Office still held out, nor was it till the spring of 1875—under pressure of a threat of the Egyptian Government to close the old mixed Tidjaret Courts, and so leave French citizens totally without means of legal redress against either natives or other foreigners—that the question was at length referred to the Assembly, where, in spite of considerable opposition, adhesion to the measure was finally voted in December of the same year, only a few days before the date fixed for the opening of the new courts. In the meantime, all the new judges except the French had been appointed—the Europeans on the recommendation of their respective Governments, and the natives from amongst the numerous band of young

Egyptians whom the Khedive had some years ago sent to be educated in France and Germany with a view to these reforms.

On New Year's Day, 1876, when also the Gregorian was officially adopted in place of the old Coptic calendar —Riaz Pasha, then Minister of Justice, and who during a previous term of office as Minister of Foreign Affairs had also vigorously promoted the reform, inaugurated this "new departure" in Egyptian civilisation by publicly installing the Tribunal of First Instance at Alexandria; but to give the French Government still further time to recommend its nominee, the opening of the new courts for actual work was postponed till the 1st of February, when, except as regards the deferred criminal authority and civil disputes between foreigners of the same nationality, Consular jurisdiction and its many abuses came to an end in Egypt. The reform, it is true, is tentative for five years; but, whatever changes experience may then suggest in its machinery, or possibly also in some of its organic provisions, it may be safely predicted that the measure itself will be upheld.

As now constituted, the new system includes three Tribunals of First Instance—one at Alexandria, a second at Cairo, and a third provisionally at Ismaïlieh, but ultimately to sit at Zagazig—and a Court of Appeal, which also sits at Alexandria. Of the inferior courts, that at Alexandria—divided into two chambers, with equal jurisdiction—consists of fourteen judges, of whom six are natives and eight Europeans; that at Cairo of three natives and five foreigners; and that at Ismaïlieh of three natives and four foreigners. The nominal chiefs of all three are natives, but foreign vice-presidents actually direct their proceedings. In the Court of Appeal the alien element is still more preponderant,

the bench of eleven judges there consisting of seven foreigners and only four natives, under the vice-presidency of Dr. Lapenna, an eminent Austrian judge whose ability, tact, and independence have already won for this court—and through it for the whole reform—a large measure of public confidence and respect. Of the seventeen foreign judges thus functioning, England, France, Austria, Italy, Germany, Russia, Denmark, and the United States have each recommended one, Belgium, Sweden, and Greece two each, and Holland three.[1] The whole receive a uniform salary of 1,600*l.* a year, but their native colleagues only half that amount. As the other machinery of the measure has been fashioned after the Continental model, it includes a foreign *procureur-général*, substitutes, *greffiers* (also foreigners), and a very complete staff of interpreters, clerks, and bailiffs of mixed nationality. The judges are irremovable for five years (except for judicial misfeasance pronounced on by their fellows), and thence after will, like our own, hold their office during "good behaviour." The proceedings are conducted in Arabic, French, or Italian, and a numerous bar of qualified foreign advocates furnishes litigants with ample means of attack or defence. For the purposes of jurisdiction, the whole country is divided into three sections, the first of which, that of Cairo, includes Upper and Middle Egypt from Assouan to the apex of the Delta, with a population of nearly 3,500,000; the second, that of Ismaïlieh, the Canal districts, the adjacent desert, and part of the Delta, with about 1,000,000 inhabitants; and the third, that of Alexandria, the

[1] The work of the four courts is taken as follows: five judges sit at the same time in each of the Tribunals of First Instance, eight in the Court of Appeal, and one as a judge in chambers to hear summary applications. The drafting of the judgments, which are all written, is done in turn by each of the judges on the sitting rota.

remainder of the Delta, with another 1,000,000 of settled population, and about 10,000 Bedoween.[1]

But, although the judicial and other *personnel* is thus complete, and the jurisdiction exercised includes all civil disputes between the Government and natives on the one hand and foreigners on the other, as also those between foreigners of different nationalities, and all suits and registrations of sale and mortgage whatsoever of real property, the reform is yet at best only a half measure. For disputes between themselves or with the authorities, the natives are still left to the old *mekkemehs*, where the poor man has an indifferent chance against the rich, and both even less against the Government. It is but fair to admit, however, that since the chief Cadi has been appointed directly by the Khedive, and paid a fixed salary of 4,000 Napoleons a year, instead of being commissioned from Stamboul for a year's plundering by fees, the justice administered by these tribunals has much improved. The new code of the international courts has been as far as possible introduced, and under the firm and liberal control of the present Minister—Cherif Pasha, who holds the double portfolio of Justice and Foreign Affairs—the worst scandals of the old system have been in great part weeded out. But, as against administrative abuse, these native courts still afford little

[1] The report for the judicial year ending October 15 last—which, however, only included six months' actual work, with three and a half months' vacations—states that the Alexandria Tribunal of First Instance had heard and decided 1,360 civil and commercial causes out of 2,684 set down, and 1,500 summary claims; that of Ismaïlieh 312 out of 628 entered, besides 197 out of 264 summary cases; that of Cairo 631 out of 1,538, plus 622 out of 1,000 summary; and the Court of Appeal 75 out of 183, besides sitting as a Court of Arbitration on outstanding claims by foreigners against the Government. The fees received by all four tribunals during the term amounted to 30,000*l.* towards covering salaries of 60,000*l.*

or no protection.[1] It was, however, necessary to await the result of the new mixed measure before attempting any very radical changes in the native system; but it is understood that if the international experiment proves a success, a clear sweep will be made of the old Koranic law and procedure, and Government, natives, and foreigners be all alike brought within the scope of the reform which is now so satisfactorily on its trial. The logical and necessary consequence will be the complete abolition of the Capitulations in Egypt, be their fate in Turkey what it may. It is, therefore, of good augury for the national progress that the new tribunals have already won the full confidence of both natives and foreigners, and that the Government also loyally bows to their authority. The independence of the Court of Appeal in unanimously affirming its jurisdiction over both the Government and the private estates of the Khedive himself in the matter of foreign claims against either,[2] has especially strengthened popular faith in the

[1] The confidence with which these international tribunals are already regarded by the natives, as compared with their own *mekkemehs*, is shown by the now common device of plaintiffs who have claims either against other wealthy natives or the Government, fictitiously ceding their rights of action to foreigners, and thus bringing them within the jurisdiction of the new courts.

[2] This assertion of jurisdiction arose in connection with the decree of May, 1876, unifying the whole of the Government and Daïra debts, the validity of which was disputed by certain foreign holders of bills of exchange drawn by the Daïra and accepted by the Minister of Finance. The Tribunal of First Instance having held that the decree in question barred such claims, the Court of Appeal reversed the decision, and decided that no administrative act to which the Powers were not parties could affect the right of their subjects in respect of claims against either the Government or the personal estate of the Khedive. His Highness demurred to this interpretation of the section of the organic law on which the Court relied, but consented to be bound by the opinion of the foreign Governments; and this being against his own view, he has since loyally acknowledged the jurisdiction thus affirmed.

reality of the reform, and shown how safely its agents may be entrusted with larger powers. There can be little doubt that the confidence thus felt will continue to be justified, and that in 1881 this new *régime,* modified as experience may have suggested, will permanently and exclusively replace the old. Egypt will then present a unique example of a Mussulman State governed by a system of laws in harmony with modern civilisation, under the ægis of which all classes of its population will, for the first time, enjoy equal justice and protection from administrative abuse. History will contain no grander monument of the reign of Ismaïl I.

CHAPTER XIV.

MANUFACTURING AND OTHER INDUSTRIES.

Skilled Industries not Improved Proportionately to Agriculture and Commerce—Misdirected Efforts of Mehemet Ali to Promote Them—Official List of Trades, Incomplete—*Esnafs*, or Trade Guilds—Weavers—Metal Workers—Workers in Wood—Masons and Bricklayers—Tanners and Curriers—Potters—Paper-making—The Boulak Mill—Bakers and Millers—Embroiderers—Goldsmiths—Turners—The Old *Mushrabeeyahs*—Modern Skilled Labour chiefly done by Europeans—Artificial Egg-hatching—Cotton-factory Workers—Poverty of Mineral Resources—Salt-pits—Natron Lakes—Petroleum—Fisheries—Nile Boatmen—General Inferiority of Native Skilled Work—No Chance of Competing with Europe—True Policy of Government to Encourage Agriculture.

THE great development in Egyptian agriculture and trade within the past twenty or thirty years has not been attended by corresponding improvement in the skilled industries of the country. With a few exceptions these are still as backward as they were a hundred years ago. In the three centuries of mixed Turkish and Mamlouk misrule which followed Ottoman conquest, Arab art of every kind lost its cunning, and when Bonaparte's *savants* entered Cairo they found its handicrafts, as its learning, at the lowest ebb of decadence. Twenty years later Mehemet Ali began a series of efforts to revive the old mechanical skill for which Egyptian workmen had once been famous, but the special aim and the methods of his reforms in this direction were alike unsound, and costly failure was the result. Fascinated by the flattering theory then cherished by more than one European Government, of making his country independent of all others for its manufactures, he imported foreign artisans and machinery on a large scale, and established factories

to produce everything required for home consumption which the old handicrafts of the country did not already supply. But he worked the whole on a vicious system of close Government monopolies which underpaid, and consequently discouraged rather than developed native skill. As the products, too, of his new workshops cost more than they could have been bought for in the European markets, industrial failure was not compensated by commercial success, and even before the death of the old reformer most of his factories were closed. During the reign of Abbas Pasha, in this, as in all else, the country rather retrograded than advanced; and although monopolies were abolished by Saïd Pasha, native industry received from him little or no other stimulus or relief. Not much more can be claimed for the earlier years of the present reign, when the energies of the Khedive were chiefly applied to the extension of public works, the skilled labour on which was mostly done by foreigners; but the later Hausmannisation of Cairo and Alexandria, and the impetus given to technical education in the Government schools, have materially improved the class of work done by the constructive trades within the past six or eight years. The Government and Daïra factories and private enterprise (mostly foreign) have also contributed their quota to the same result; but barring this comparatively small aggregate of improvement, little or no industrial progress has been made since before the French occupation. This lack of advance in the mechanical arts is no doubt in part explained by the fact that agriculture absorbs so preponderant a share of the native labour, the proportion of cultivators to artisans being, roundly, about 1,000,000 [1] to

[1] M. de Régny's *Statistique de l'Egypte* reckons the whole, including gardeners, at only 410,000; but his estimate omits the provinces of Ghizeh,

60,000. But the main cause has been the low level of material civilisation among nine-tenths of the population, and till lately, the absence of Government encouragement except during the spurt of misdirected manufacturing effort made by Mehemet Ali. The latest official return on this subject gives the subjoined statistics[1] of the industrial classes; but the list is incomplete, omitting as it does, bakers, millers, bookbinders, printers, carriage-builders, cotton-pressers, mechanical engineers, sugar-refiners, and several other crafts of modern date which, although chiefly worked by foreigners, also afford employment to many natives; and in the instance of paper-makers, it is obviously inaccurate, as the Daïra mill at Boulak, which has a monopoly of this industry, employs a large number of Arab and Copt hands.

The great majority of the forty or more trades practised in Egypt form separate *esnafs* or guilds, membership of which is obligatory on all who work at the respective

Beni-souef, and the Fayoum, and takes no count of the many thousand hands employed on more than 100,000 *sakkias*, *shadoufs*, *taboots*, and steam-pumps.

[1] Armourers	371	Painters	686
Blacksmiths	2,605	Papermakers	1
Brickmakers	434	Pipemakers	257
Caulkers	910	Plasterers	530
Carpenters and Sawyers	6,473	Plumbers	35
Charcoal-burners	320	Potters	834
Clockmakers	77	Ropemakers	19
Coppersmiths	1,296	Saddlers	770
Dyers	5,109	Shoemakers	2,275
Embroiderers	1,871	Sievemakers	598
Engravers	321	Stone-cutters	1,404
Glaziers	86	Tailors	2,520
Goldsmiths and Jewellers	2,630	Tanners	971
Lime-burners	2,482	Tinmen	515
Marble-cutters	285	Tinsmiths	436
Masons	4,113	Upholsterers	582
Matmakers	1,463	Weavers	10,001

crafts. This system of *esnafs*, which also obtains in Turkey, is said to have originated during the Baghdad Caliphate; but a similar organisation prevailed among the ancient Egyptians, and it is probable therefore that these trade corporations of Alexandria and Cairo—to which and a few other large towns the industrial population of the country is chiefly confined—are in the main native relics of the old time. At any rate, the system has been in immemorial use, and is probably maintained for the facilities it affords in the collection of personal taxes, as well as for the guarantee it is made to offer for the due execution of works ordered by the Government. Each *esnaf* is presided over by a sheikh, who is in practice chosen by the higher members of the craft, but is formally appointed by the Government, to which he pays a nomination fee of about 20*l*. He is, in fact, the ruler of the guild, admitting members, fixing the scale of wages, directing the manner in which contracts shall be carried out, and selecting the workmen by whom they shall be executed. He also collects the taxes payable by the guild, and is responsible to the Government for all matters connected with it. The members of the craft receive on admission certificates stating their proficiency and the rate of wages it entitles them to demand. They are, as a rule, restricted to the particular trade of the guild; or if, as is rarely the case, allowed to follow two crafts, or even separate branches of the same one, they are charged an increased tax, unless they can arrange matters privately with the sheikh. They may contract to do piece-work, but if employed by the day they can only ask for the wages fixed in their certificate. Besides these guild regulations, however, there is little or no legislation specially affecting the industrial classes.

The costliness and magnitude of the Khedive's sugar-factories would entitle them to rank among the public works of Egypt; while, as they are at the same time industrial adventures of his Highness, they might with equal fitness be described here. They fall still more appropriately, however, within the scope of the chapter on the Daïra, to which they belong, and will therefore be noticed in that connection. Of the private trade of the country, numerically the most important is that of the weavers. Of these about 1,600 are employed in the three Daïra factories of Foueh (belonging to the Queen-mother), Boulak, and Shoubrah, near Cairo. The first of these manufactures nearly 50,000 *tarboushes* (the Egyptian fez) a year, of which the supply required for the army and navy is sold to the Ministry of War, and the remainder to the public. They also turn out annually about 315,000*l.* worth of woollen cloth, the greater part of which is similarly bought for the troops. The wages in these establishments average about 8*d.* a day. This industry, however, is mainly carried on in private workshops, of which, according to the latest available statistics, there are in Cairo—sixty weaving mixed cotton and flax, twenty woollen cloth, and eleven manufacturing carpets, besides 107 others spinning and preparing woollen and cotton yarn for the loom; and in Alexandria thirty-eight weaving cotton cloth, and thirty-one making carpets. In Damietta 166 shops weave silk, besides sixty-two others which are employed in dyeing it. One of the chief industries of Beni-souef, also, is carpet-making, and the weaving of coarse linen stuffs for the fellaheen. The rest of the hands engaged in textile work are employed in various other parts of the country in shops of from one to a dozen or more looms. The

wages in this trade vary in different districts, but 9*d.* a day is about an average of the whole.

In metal work the Government takes the lead with three large establishments at Cairo—a cannon foundry, a rifle factory (with machinery for producing the latest Remington arms), the large engineering shops at Boulak, and a cartridge factory, which annually consumes a great quantity of raw copper. At Alexandria there are also an arms factory and extensive engineering workshops for the navy and the Khedivieh Steam Company, besides a small similar establishment at Suez. The official return is incomplete as to the distribution of private native industry among these trades, but Cairo may be mentioned as employing 85 iron foundries, 80 whitesmith's shops, 73 copper ditto, and 240 workers in gold and silver—chiefly Copts, Jews, and Armenians—besides a large number of armourers and blacksmiths. Alexandria, according to the same authority, reckons 6 iron foundries, 43 smiths' forges, 100 tinmen's shops, and 93 workers in the precious metals. The large provincial towns absorb the rest. The wages of these various trades range, for native workmen, from averages of 1*s.* 6*d.* to 2*s.* a day, as much of the work is done by piece, and the amount earned therefore depends on the skill and activity of the mechanic.

Workers in wood, from water-wheelwrights to house carpenters, now earn about a similar average wage. Of these also the great majority are employed in Cairo and Alexandria, but within the past eight or ten years the extension of building in the chief provincial towns has attracted thither large numbers of this class of mechanics, and correspondingly improved their rate of pay, which previously ranged below that of metal-workers. In what

may be called the two capitals, however, the best work is all done by foreigners, at wages double, or even treble those paid to native hands. The same may also be said of bricklayers, masons and other workers in stone, whose methods of labour are still for the most part as rude as when hardly anything better than a mud-hut was to be seen outside Cairo and Alexandria. Throughout the interior, sun-dried tiles are the structural material still most in vogue; and even where imperfectly-burned bricks[1] are used, the mortar, and the workmanship in laying it, are generally so bad as to give the wall built with them little advantage, except in appearance, over the homelier mud one on which neither fire nor lime has been spent. Under European guidance the Egyptian mason or bricklayer can work fairly well; but left to himself, he troubles little with rule or plummet, and if his wall keep at all within the perpendicular, accident, quite as much as his eye, is to be credited with the result. Building-stone in Cairo is obtained from the Mokattem quarries, behind the Citadel, and in Alexandria from those of Mex, five miles west of the city. These together now also supply the limited wants of the interior—where, barring in the capital, a stone structure is a rarity—which, until a few years ago, were chiefly dug out of the nearest temple or other ancient monument. But this vandalism has been stopped, and Mex and the Mokattem now furnish nearly all the stone used throughout the country, except what is imported ready cut from Trieste.

Tanners and curriers, although unable to compete with the more scientific processes of Europe, still turn out excellent leather of cow, buffalo, sheep, and goat-

[1] The best native bricks are those made in the Government yard at Galioub, where some sixty workmen produce nearly 4,700,000 red bricks a year, the ordinary market price of which is about 18*s.* a thousand.

skins—the last of which, as upholsterers' "morocco," finds a ready market abroad. The Government works a large tannery at Alexandria, which annually prepares between 30,000 and 40,000 skins, chiefly for army use; and private industry maintains some thirty others there and in Cairo, with an outcome of above 200,000 skins a year. The wages in this trade range from 10*d.* to 1*s.*, and those of curriers and saddlers from about 1*s.* 4*d.* to 1*s.* 8*d.* a day.

Of the once famous ceramic art of Egypt only pottery and the commonest glass work now survive. The first of these, however, forms perhaps historically the most interesting, though far from the most flourishing of the contemporary industries of the country; barring only that the processes and results of the craft as now worked are ruder than those of 3,000 years ago, both are almost identical with its pictured presentments in the tombs of Upper Egypt. In fact, what may there be seen in colours that have survived a hundred generations may now any day be witnessed in real life and tangible substance at Memphis, at Mellawee, at Manfalout, at Assiout, and especially at Ballas and Kenneh, whence jars, jugs, tiles, and porous water-bottles, absolutely identical in form and method of manufacture with those in use before the Exodus are still annually floated down the Nile by thousands. The total produce of the trade averages nearly 500,000 pieces a year of all descriptions. Glass-blowing has dwindled to eight or ten small shops in Cairo, which manufacture annually some 10,000 objects of the commonest ware, and about 20,000 chimneys for the petroleum lamps now in general use. The wages of these two kindred crafts range from 1*s.* to 1*s.* 6*d.* a day.

Although paper-making figures in the official list

of trades with only a single representative, the fine Daïra factory at Boulak, which, as above remarked, monopolises this industry in Egypt, employs nearly 220 hands, the whole of whom, barring a few English foremen and engineers, are natives. The machinery of this establishment—which was erected in 1870—is English, and like that of many of the sugar-factories, has the sole defect of being on far too large and costly a scale for the local wants of the trade. It annually manufactures some eighteen tons of coarse packing paper—chiefly for use at the sugar-factories—and about 70,000 reams of printing and writing papers of various qualities, for the coarser of which the species of grass called *hilfa*[1] and sugar-cane fibre stalks supply cheap and abundant raw material. As most of the writing paper made is specially adapted for Oriental caligraphy, the surplus beyond what is used in the Government offices and sold to private consumers is exported to the Hedjaz, and a few bales are also sent yearly to India. In immediate connection with this factory is the "national" printing office, which, with a large annexed lithographic shop, also belongs to the Daïra-sanieh. Besides the forms required by the various Ministries, the railway administration, the Daïras, and other branches of the public service, this establishment prints all the school books issued by the Ministry of Public Instruction, in Arabic, Turkish, and the European languages; and although the whole of the hands employed

[1] Some three years ago the director of this establishment assured the writer that, with the available abundant supply of this grass, he could compete advantageously with the cheap "straw" papers of Europe, and was then executing a contract for a Glasgow newspaper of large circulation. As paper, however, has not since figured noticeably among the exports from Alexandria, it is to be feared that the experiment did not prove a complete success.

—nearly 100 in all—are natives, the work would do credit to most London or Paris printing offices. Besides this large Daïra establishment, private industry carries on five other printing and as many lithographic shops in Cairo and four in Alexandria, in which however many of the workmen are foreigners. The pay of the 200 or more natives engaged in these trades varies from 1*s.* 9*d.* to 2*s.* a day for compositors, while that of lithographers is about ten per cent. less.

Bakers and millers, although also omitted from the official return, form a large industrial class. The former alone number in all above 2,300, specially engaged in the trade, irrespective of the private bread-making by the fellahs, who, like the Bedoween, do most of their own milling and baking. Of this total, above 1,000 are registered in Cairo, 490 in Alexandria, and the remainder in the other provincial towns. The universal love of pastry, chiefly in the form of the cake called *fateereh*, further employs above 1,200 makers of this greasy luxury, of whom some 800 find work and customers in the capital, 200 in Alexandria, and the rest elsewhere. To provide flour for all these, 27 steam mills and 575 driven by horse-power are worked in Cairo, respectively 31 and 127, besides 37 windmills, at Alexandria, and a few of all three classes at Tanta, Zagazig, and Mansourah. For the supply of the army and navy the Government works a large steam mill at Cairo, and two great bakeries there and at Alexandria, which furnish all the bread and biscuit required by both services, as also for the extensive gratuitous distributions of both which are made to passing pilgrims, schools, and other charities. The wages in these two trades are lower than those of most other crafts, averaging for the common hands not more than 9*d.* a day.

In nearly the whole of these handicrafts the work done by the natives is, as a rule, inferior. The masons, shoemakers, and tinsmiths turn out perhaps the best; but even their work, as compared with that of foreigners, is clumsy and rough in finish. Occasional specimens of good embroidery may be met with, but, although pleasing to the European eye from its being applied to objects with which embroidery is not generally associated in Europe, and from the pattern being Eastern, these also are much inferior in delicacy and precision to the best European work. So, too, with goldsmiths' work, which, though in some of its results very quaintly pretty, is as rude in finish as its narrow range of patterns is antique—for the originals of nearly every one of these last may be seen in the Boulak Museum, or among the wall-pictures of Thebes. The re-construction of so much of Cairo and Alexandria in a European style of architecture, and the imitation, more or less rude, of a similar fashion in the new buildings in most of the other large towns has largely led, within the past dozen or fifteen years, to disuse of the old-fashioned *mushrabeeyah*, or projecting lattice window, and to a consequent very marked decline in the production of the beautiful turnery-work of which these were composed. So pretty indeed is this, that travelling collectors now pay more for old specimens of it than a whole window cost fifty years ago. The same remark also applies to the curious and intricate panel-work employed in interior decorations, which is similarly being superseded by tawdry French and German mouldings. In Cairo and Alexandria a large opening is consequently offered to the better skill of Europeans—especially in mechanical engineering, railway plate-laying, carpentery, smiths' work, and the best class of

stonemasonry and bricklaying. The engineering required is chiefly done by Englishmen, at wages ranging from 8*l.* to 25*l.* a month, or by Frenchmen or Germans at from twenty to thirty per cent. less. But in this craft natives have, within the past few years, qualified to an extent which has sensibly reduced the number of Europeans employed, with the result that both on the railways and in fixed factories, a large proportion of the engine-drivers are now Egyptians, receiving from 8*l.* to 10*l.* a month. In the other trades Maltese take the lead in respect alike of skill and wages, receiving as ordinary workmen, 5*s.*, or as foremen, from 6*s.* to 8*s.* a day; Frenchmen, Italians, and Greeks ranking next, at from 3*s.* to 5*s.* per diem.

Passing from regular handicrafts to industries in which the labour cannot in the same sense be called skilled, the oldest and most peculiar is that of artificial egg-hatching, which provides almost the whole poultry of the country. This curious process was already ancient when Herodotus made his note of it at Memphis, and as it was carried on then, so is it still in nearly every detail. The building in which it is performed, called *mahmal-ferakh*, is constructed of burnt or sun-dried bricks, and consists of two parallel rows of small chambers and ovens—the latter uppermost—each about eleven feet square by about five feet high, and divided by a narrow vaulted passage, through which the rearer enters to watch the progress of the operation. This last takes place only during two or three months of the year, in spring, and as soon as the *mahmal* is opened the eggs are brought in by the neighbouring peasants, and after being carefully examined—with the result of about one-fifth being rejected, as not fecundated—are placed on mats or straw sprinkled with

bran, on the floor of the lower chamber. The ovens above are warmed with fires of *gileh*, the flat cakes of mixed dung and chopped straw described elsewhere. These *mahmals* vary in size from twelve to twenty-four chambers, and in the larger ones receive about 150,000 eggs during the annual term of their being open. The hatching takes generally twenty-one days, during which the temperature is maintained at from 100° to 103° Fahr., fixed, it need hardly be said, by the practised sense of the rearer, without the aid of a thermometer. In the result, about two-thirds of the eggs produce chickens, of which the owner of the *mahmal* retains one-half, as his fee in kind, and gives the remainder to the peasants. There are in all some 600 of these establishments throughout the country, hatching above 12,000,000 chickens a year.

Although not reckoned in the official list of trades given in a previous foot-note, the workers in the cotton factories form a large industrial element, ranking in respect of wages about midway between common labourers and artisans. Most of these establishments date from the beginning of the American war, which gave so sudden a spurt to the Egyptian cotton trade. There are in all eight steam pressing mills—six in Alexandria, with nine presses, and two in the interior—and about 150 ginning factories, for the whole of which last, however, there is not now constant work. These establishments[1] employ a large number of men, women, and children, at wages varying, for the common hands, from 5d. to 2s. a day.

As Egypt possesses few or no mineral resources,

[1] The largest of these cotton factories is that of Messrs. Whitworth Brothers, at Mansourah, which comprises 80 cotton-gins, several presses, garbles for cleaning seed, oil-mills, flax-scutching machines, and an extensive corn-mill.

properly so called, it has in consequence no industries that can be classed strictly under this head. The old emerald mines of Jebel-Zabára and Wady-Sakáyt between the Nile at Edfou and the Red Sea, the lead mines of Jebel-er-Resâs in the same region, the gold mines in the Bishari country, and the turquoise mines of Magharah in the peninsula of Sinai, have all been long ago abandoned, although there is reason to believe that with improved modern skill and appliances some of these might be profitably re-opened.[1] The granite and limestone quarries of Assouan and the Mokattem are still of course worked, as are also those of Oriental alabaster and porphyry at Wady-Omargoob and Jebel-ed-Dokhan in the eastern desert—the former of which supplied the material for the Citadel mosque at Cairo, while from the latter were taken, during the time of Trajan and Adrian, most of the splendid porphyry columns that still adorn Rome. Of coal, tin, silver, and the more modern metals, no traces have been discovered, and only the faintest of iron, copper, and lead, in, respectively, some rocks near Philæ, and Mounts Baram and Zabára. Apart, therefore, from the quarries mentioned, the mineral products of the country are narrowed to the natron found in the province of Behera and at one or two other places on the Upper Nile, and to the nitre and other salts collected in the various *salines* of Lower Egypt, or worked in the rock from along the western coast of the Red Sea. The first of these is chiefly gathered in the Wady-Natroon, about thirty-five miles west of Teranéh, on the Rosetta branch of the Nile. The valley takes its name, as mentioned in a previous chapter, from a series of rock-walled basins whose waters contain crystallisations of natron or subcarbonate, and of

[1] See note to p. 11.

muriate of soda, or common salt. These basins or lakes —called *mellâhot*—of which there are in all eight, besides two smaller ponds that dry up during the summer, are fed by infiltration from the Nile, whose waters take three months to percolate through the interjacent desert of rock and sand, the salts of which they carry with them, and deposit in these reservoirs. Thus, the annual rise in the water in the lakes begins only about the end of December, and continues to the middle of March, when the fall commences, after which, during the summer months, the subcarbonate and muriate are collected. All the lakes contain the latter, but only some of them both salts, which in that case crystallise separately, the natron underneath in a layer of some 30 inches thick, and the common salt above in one of about 18 inches. The natron is of two kinds—the *khartayeh* and the *sultanieh*, which latter (the better of the two qualities) is further distinguished as black and white. This (the *sultanieh*) is taken from the bed of the lakes as the water retires, and the *khartayeh* from the neighbouring low grounds which have not been submerged, but to the surface of which the salt rises. This valuable product is prepared for market by being washed, dissolved in water, and then again crystallised by the action of artificial or solar heat. The muriate is more commonly exported in the rough as collected. The official returns of this industry do not distinguish between the two salts, but state the total quantity of both gathered in one season at 90,169 pesés, of which 71,297 were collected directly on account of the Government, and the remainder, in the neighbourhood of Barnoughi in the same province, by a contractor who farms the enterprise from the Treasury. The cost price of the former, delivered in Alexandria, averaged about 10 pias. 8 paras

per pesé, and that of the latter, being nearer the port, 6 pias. 10 par. The population of the Wady-Natroon is about 300, of whom some 200 are employed in this industry, and the remainder belong to the four Coptic monasteries,[1] which form the chief attraction of visitors to this desolate region. Natron is also found on the brink of some ponds in the valley of El-Kab, above Esneh, and on the shore of the Birket-el-Korn, in the Fayoum, but in neither place in sufficient bulk to be of much commercial value. As it is, about 30,000 pesés of natron are annually exported from Alexandria, chiefly to Austria and Italy. Large quantities of raw nitre are also extracted, chiefly on Government account, from the mounds that mark the sites of ancient cities in Middle and Upper Egypt. It is thus procured more or less abundantly from Ghizeh, Bedreshayn, Sakkara, Enaneh, Mensheeyah, Denderah, Karnak, Koum-Ombos, and from various places in the Fayoum. The *débris* of the old walls is thrown into shallow ponds, when the nitre dissolves, and is then drained off into still shallower basins, the water in which rapidly evaporates under the strong solar heat, leaving a layer of crystallised nitre at the bottom. The total quantity thus produced averages about 650,000 kilos a year, which, when refined at the Government saltpetre works at Old Cairo, yield about 560,000 kilos of pure nitrate of potash.

In addition to this large collection of natron and nitre, above 72,000 ardebs of sea-salt are annually produced from twelve pits at Damietta (the largest of the

[1] Egypt, which once swarmed with monasteries and nunneries, has now properly none of the latter, and only seven of the former—these four in the Wady-Natroon, those of St. Anthony and St. Paul in the eastern desert, and one at Jebel-Koskam, in Upper Egypt. There are, it is true, several other religious establishments, but the priests are seculars and the inmates of both sexes.

whole), Rosetta, Farkshour, Ballachi (on Lake Menzaleh), Brullos, Alexandria, Havara, Port Saïd, Ismaïlia, and Suez. The last official return reports nearly 700 persons and above 1,300 animals as finding employment at these twelve pits, at wages averaging for the former about 9*d.* a day. There are also two other large pits at Rawiah and Darrah, near Souakim, which further produce some 30,000,000 quintals a year. Of this quantity about 1,000,000 quintals are exported to Djeddah, Aden, and Bombay, and as much more is carried inland by caravans to Taka, northern Abyssinia, and other parts of the interior. The remaining surplus of the whole produce finds a market chiefly in the Levant and at Constantinople. Rock-salt exists in almost inexhaustible abundance along the coast of the Red Sea below Suez, cropping up to the surface in seams of great thickness and purity; but as yet these have been merely tapped at wide intervals, and contribute little or nothing to the salt produce of the country. This industry, which is a Government monopoly, yields to the Treasury a net annual revenue of about 250,000*l.*

Petroleum of good quality has also been "struck" about a hundred miles south of Suez, but only a few sample barrels—drawn off last year by an American mining engineer in the service of the Government—have yet been raised. Machinery, however, for opening and working several wells has been procured, and will be *in situ* in a few months, when it is expected that not only the whole of the lubricating oil required for the railways, the Khedivieh steamers, and the Government and Daïra factories will be thus provided at a low cost, but a considerable excess be available for export.

The sea and fresh-water fisheries, which are also farmed out, form an important industry, the former employing

above 3,700 persons and 800 boats, and the latter in all over 6,000 hands. Of these last, nearly 4,000 find work on Lake Menzaleh, with some 400 boats, and the remainder on the other lakes, the Nile, and the large navigable canals. As the total quantity of the fish caught greatly exceeds the home consumption, the excess, salted and dried, forms a considerable article of export to Syria, Turkey, and Greece. The proceeds of this monopoly being lumped together in the Budget with those of boat-farming, bridge-tolls, and charges on waste lands, its separate value to the Treasury cannot be stated; but the farming of Lake Menzaleh alone is said to yield 60,000*l.* a year.

The Nile boatmen and those employed on the larger navigable canals form another numerous class of in all above 36,000, working some fifty river passenger steamers and tugs, and above 9,000 sailing boats of various kinds, from the yacht-like *cangias* or *dahabeeyahs* to the ponderous cargo-carrying *maashes* or cock-boat *sandals*. They are nearly all fine muscular men, inured to severe labour in rowing, poling, or towing, and are withal perhaps the merriest of the Egyptian working classes. They mostly belong to the river-side villages, and in spite of the still not uncommon device of sacrificing an eye—where ophthalmia has not already done it—to avoid conscription, they mainly furnish the crews of the small navy and of the Khedivieh Company's steamers. In both they are now fairly well treated, and the service is much less dreaded and avoided than it was a few years ago.

If the level of native skilled labour in Egypt is thus generally low, it is at least quite up to the wants of the great mass of the population. A vast advance must be

made in both the social and material civilisation of the country before a much higher class of work, or more of it, will be required for home consumption; while as regards manufactures for export, the chance of Egypt competing successfully with Europe is still less now than it was fifty years ago. Sugar-making is perhaps the sole exception, and the foundations of that industry have been laid at a cost which no mere private enterprise could afford. From an æsthetic point of view the loss of the art which built Karnak, or of the later and more delicate skill that reared the older Cairene mosques, may be lamented; but the economist and the politician will not greatly regret either, nor the general backwardness in humbler crafts, if agriculture—the oldest and still most important of Egyptian industries—be improved and encouraged as it is the common interest of both the people and the Government that it should.

CHAPTER XV.

SLAVERY.

Popular Misconception on this Subject—Difference between Eastern and Western Slavery—Property in the Person almost the only Common Feature—Status of Slave better in Egypt than in Turkey—Universality of the Institution—Different Classes of Slaves—Circassians now Rare—Abyssinians and Soudanis—Egyptian Slaves protected by Religion and Public Sentiment—Additional Safeguards decreed by the Khedive—Their Abuse by the Consuls—Consequent Limitation of Consular Interference—Existing Facilities of Emancipation—The Slave Trade legally Abolished, but still surreptitiously carried on—How it is fed—Prices—The Institution now merely a Mild Domestic Servitude—Acknowledged Cruelties of Slave-hunting—The Khedive honestly bent on its Abolition—Colonel Gordon's Commission.

On few topics connected with the East is Western opinion more at fault than on the subject of this chapter. Thanks mainly to the well-meant but totally misleading exaggerations of professional philanthropists, the popular notion of Turkish and Egyptian servitude has been formed from illustrations of the cruel and brutalising bondage established in our own colonies till within little more than forty years ago, which survived for thirty years later in the Southern United States, and which still exists in Cuba and Brazil.[1] But barring the owner's right of property in the slave, the two systems have hardly a feature in common; and even this the patriarchal manners and, on not a few points, the humaner legislation of the East have beset by limitations which distinguish it widely from the absolute title of the

[1] The recent discussions in Parliament, and the appeals of the Anti-Slavery and Aborigines Protection Societies to Lord Derby, amply exemplify the prevailing misconception on this subject.

Cuban or American Legree. Many, too, regard slavery in the East as a purely Mohammedan institution, forgetting that it is older than Abraham, and ignorant that till within quite recent years it has been practised by Moslem and Christian alike. Under the less liberal laws and social customs of Turkey the right is no longer accorded to rayahs; but in Egypt the law makes no difference between Arab and Copt, and slaves are therefore still commonly owned by both. But in both Turkey and Egypt the condition of the slaves differs *toto cælo* from that of the old Roman *servus* and the modern West Indian and American negro. In the latter cases he was and is a mere chattel, subjected to every degrading hardship, and liable to be cruelly abused at will. In the Levant he is simply an unwaged in-door servant, whom both law and religion protect from ill-treatment, and who, as a rule, is hot only as kindly used as ordinary domestics in Europe, but enjoys over them not a few advantages. Slavery is of course bad and indefensible under any conditions, but it is right that the vast difference between its Eastern and Western types should be understood.

In the absence of any official statistics on the point, no even approximate estimate of the number of the slave population in Egypt can be given. It must, however, be large, as nearly all the in-door work in every family above the poorest is done by servants of this class. From the house of the pettiest dealer or even better class mechanic, up to the palace of the Khedive, slave labour for this kind of work is the rule. And here one of the many important distinctions between Eastern and Western servitude is at once met with. In Egypt and Turkey domestic work only is done by slaves,[1] the

[1] To this rule there are now in Egypt a few exceptions, in the case of

cases being rare in which they are employed even in stables or light gardening; while in the West their chief value has always been as field hands. So inwrought, indeed, is the institution into the domestic and social life of the country, that the possession of one or more slaves is as essential to "respectability" amongst one's neighbours as is that of a servant for menial work in a European family; and this social consideration has, probably, more to do with the maintenance of the institution than any question as to the relative cost of slave and free labour. The Koranic law on the subject being, of course, the same in Turkey as in Egypt, the condition of slaves in the two countries is in the main identical, but practically it is in many respects better in the latter. In Turkey slaves are, as a rule, kindly treated, and in instances not a few have risen to high office; but they are none the less made to feel that, so long as they remain slaves, their status is much below that of free men. In Egypt, on the contrary, the fact that for centuries a race of slaves—the Mamlouks—ruled the country, has long ago relieved bondage from the stigma of social degradation that attaches to it in the West, and has raised the relation between master and slave to one under which the latter, indeed, owes personal service to the former, but without, either in himself or others, any sense of ignominy involved in paying it. He is, in a word, rather the dependant than the slave of his owner, who treats him—far more than free servants—as a member of the family, and in cases innumerable gives him his liberty after a few years, and starts him on his way to any

village sheikhs, who, after the increase of wealth consequent on the development of cotton culture during the American war, in a few instances bought slaves to help in field labour; but the work done by these is as light as that of the free fellah, and in respect of food and lodging they share the common fortune of their owner and his family.

fortune, save the highest in the country—for between black and white, freedmen and free men, neither the law nor society makes any practical distinction.

Slaves in Egypt may be broadly divided into *white* and *black*, although the shades of colour between these two extremes are very numerous. To the one class belong the fair-skinned Circassian and the dusky but often beautiful Abyssinian; and to the other the darker but still straight-haired Galla and the negro from Nubia, Kordofan, or Darfour. The extinction of the Mamlouks, and the indiscriminate admission of Arabs and Copts alike to the public service, have practically put an end to the importation of white male slaves, who are now rarely or never met with as adults. Some few boys are occasionally purchased as playfellows for the sons of the wealthier Beys or Pashas, but in almost every instance as soon as they reach full age they are liberated, married off—frequently to their masters' daughters—and in some way established in life. In fact, the relation of this very limited class to their owners just falls short of adoption, which was formerly very common, but is less so now. The relatively great mortality among the children of white mothers who have themselves not been born in the country, contributes to maintain the demand for Circassian girls, the vast majority of whom, however, find not merely purchasers but husbands among the sons of the wealthier classes. It is now, indeed, rare that a full-grown white girl is kept in mere concubinage, as both her cost and her personal attractions give her a value that speedily—very often at once—raises her to the higher domestic rank. But the importation of these Caucasian luxuries has greatly fallen off since the cessation of the regular traffic between Constantinople and the coast of Abasia reduced the supply, and correspond-

ingly raised the price of the smuggled article. Most of the few who now reach Egypt singly or in couples, where thirty years ago they came in scores, belong to the Circassian colonies in Roumelia or Asia Minor, and the difficulties of even their import, under the eyes of jealous foreign Consuls, are such that the trade has virtually ceased. At any rate, it is only in the very wealthiest harems that these exotic beauties are now to be found. They are mostly bought at from ten to twelve years of age, and, after being well nurtured for three or four years, and taught the usual Eastern accomplishments, are, as a rule, either married by the master of the house or given as wives to his sons. In strict law marriage does not confer freedom, but the girl is nearly always first liberated, and the offspring are, in any case, born free. One especial reason why these white girls are thus almost always married is that they wear much longer than either native Egyptian ladies or Abyssinians, retaining their fine physique to thirty-five or even forty years of age, while the latter are generally withered and *passées* before five-and-twenty. This is an important consideration in view of the now prevailing fashion among the upper classes of having only one wife; but the much higher cost of these white beauties places them beyond the reach of all but the wealthiest, and except for these the harem market is now chiefly supplied with Abyssinians, who, at a fifth, or even eighth or tenth of the price, are in all but colour and wear physically equal to the best of their white rivals. Some of these copper-skinned houris are indeed very models of southern beauty —combining with a profusion of long wavy hair, lustrous eyes, regular and delicately cut features, perfectly curved busts, and admirably moulded limbs generally, a grace and even dignity of carriage that no artificial training

could heighten. Many of the wives of the middle, and nearly all the concubines of the upper classes are taken from this source of supply, as free Arab girls never enter harems in this latter capacity. There are also many Abyssinian male slaves, whose employment and treatment are similar to those of their white fellows, and who, once liberated, may, like the latter, rise to any attainable rank in the public service.

The other class of wholly black slaves is much more numerous, and is generally employed in lower kinds of domestic work than those just noticed.[1] They comprise specimens of every black race known to northern and central Africa, from the mixed Arabs and Abyssinians of Nubia, Berber, and Sennaar, to the pure negro of Darfour, and the yet other cross—neither negro nor Abyssinian—which forms the Galla tribes. These it is whose kidnapping and other means of obtainment in the remote interior, form the chief ground of complaint against slavery in Egypt. But once in the country, and absorbed into its service, their condition, it may be affirmed, becomes not merely an immense improvement on their past, but in all respects one of the lightest forms of servitude to which the name of slavery can be given. From every material point of view they are infinitely better off than the free-born fellahs, on whom, indeed, they look down with proud contempt as an inferior class—since, as before remarked, both law and religion combine to protect them, as neither protects the peasant. A bad master can, of course, ill-treat his slave as well as his free servant to the verge of cruelty, without coming within the clutches of the Cadi; but such cases are rare, as the social sentiment on the subject is essentially humane, and quite as opera-

[1] But in families where both slaves and free servants are kept, the meanest work of all is done by the latter.

tive as public opinion among ourselves. This is, of course, occasionally disregarded; and where that happens the law now supplies a ready and effective means of redress. Already the *shériat*, or old religious law, entitled an ill-used slave to insist on being sold to another master; but soon after his accession the Khedive extended this provision by ordering his full emancipation in every case of proved abuse. This humane decree was, however, evaded in practice by the masters meeting every complaint with a countercharge of theft or other criminal offence, which availed with the too conservative and not always incorruptible Cadi to secure a sentence of imprisonment, or other severe punishment, unless the slave consented to return to his owner. To remedy this failure of justice the Khedive then ordered that the foreign Consuls should have jurisdiction in such cases, and that on their demand the native authorities should issue the necessary certificates of manumission. This very liberal provision worked fairly well for a time, till the abolitionist zeal of some of our own agents abused it in the other direction, by liberating every slave who presented himself at the consulate with even the flimsiest grievance. Many hundreds were thus set free before the abuse culminated at Mansourah, where, in 1873, our consular agent (in rank not even a Vice-Consul), emancipated no fewer than 1,700 in a single month, and would soon have liberated the whole slave population of the province if the Cairo authorities, deferring to a general outcry among the heads of families, had not interfered. In the result, the Khedive indemnified the owners of the slaves thus incontinently released, and narrowed the liberating powers of the Consuls for the future to cases in which, after full inquiry, in concert with the native authorities, positive mal-treatment should

be proved. The subjoined extract from a despatch addressed at the time by Nubar Pasha, himself a Christian, and then Egyptian Minister of Foreign Affairs, to her Majesty's Agent and Consul-General embodies the views then, and there is reason to believe still, held by his Highness as to the extent to which this philanthropic interference between master and slave can, as yet, be fairly carried:

It was impossible for his Highness to issue orders, as seems to have been understood, that it was only necessary for a slave to present himself before the local authorities in order that these latter should be obliged to give him his papers of liberation. Such an order would have been simply arbitrary on his Highness's part, and would have led to a result exactly contrary to that which he proposes, by stimulating the public sentiment against measures calculated to arbitrarily injure private rights which have been legally acquired. This sentiment is all the more founded, since in the East, and especially in Egypt, religion and usage combine to correct, as far as possible, whatever is hard or cruel in the condition of the slave. The European Governments who have abolished slavery in their colonies, have, in the interests of justice, taken into full account the rights acquired by the owners, and it was only by the payment of large indemnities that they put an end to an institution which even their religion condemned. In the orders he had issued, therefore, his Highness could not ignore his duty to protect institutions which are in Egypt consecrated by both religion and custom. For this reason the orders he has always given were intended not to authorise the Government functionaries to set free all slaves asking for liberty, but only those who may have suffered cruel treatment from their masters—whether they complained of this in person or through some other channel. In such cases the local authorities are obliged to inquire into the truth of the complaint, and once the ill-treatment is proved freedom is given.

Foreign interference is now, therefore, exercised within these limits, which equitably meet all the fair wants of the situation; since—besides the other ready means of obtaining his liberty which are afforded by

volunteering into the army—with this right of appeal to her Majesty's Consul at Alexandria, Cairo, Port Saïd, or Suez, every really ill-treated slave in Egypt holds

—— in his own hand
The power to cancel his captivity.

Nor is it merely absence of cruelty and general humanity of treatment which both law and usage thus enforce. It happens so often as to have almost become the rule that, after a few years' faithful service, the slave is voluntarily liberated, and, if a man, established in some sort of business; or, if a woman, married to an honest freeman, with whom a suitable dowry secures her ready acceptance and good treatment as a wife. Even where this is not done, slaves bought young (as most of them are) are seldom or never sold again, and in nine cases out of ten they are set free at their owner's death. A concubine, too, who bears a child to her master, not only cannot afterwards be sold, but is generally liberated, and often married by him after the birth, while the child is born free,[1] and the mother acquires the absolute right of freedom at his death.

The wide distinction which all this constitutes between Eastern and Western slavery results directly from the legislation on which the former is based. This is simply the old Mosaic law which Mohammed found in the Jewish Scripture, and adapted, with few or no material changes, to the new family life of Islam. At first, with Moslems as with Jews, slavery was maintained by the legitimate spoils of war, and in both cases it was only when these ceased that the institution was fed by the purchase of imported captives, found, the buyers

[1] Except where the mother is the property of one of the masters' wives, who has not consented to the concubinage. The child is then a slave, unless before its birth the mother has been sold or presented to the father.

were not curious to inquire how or where. In all times Africa has been the chief field of supply, and there is no reason to suppose that the cruelties practised in obtaining the victims and bringing them to market—which form the chief, if not almost the only argument against the mild form of slavery at present existing in the Levant—are greater now than they were two, three, or four thousand years ago, when the traffic had the sanction first of patriarchal practice, and then of direct Levitical law. Looked at from the standpoint of our higher modern civilisation, it is now of course none the better for this; but as the scene of the institution is still the "unchanging East," much of whose social life has been stereotyped for a hundred generations, these historical factors in the problem should not be forgotten.

Still, although the conditions of servitude in Egypt are thus comparatively easy, the death-rate among the black slaves especially is, and always has been, higher than in any other class of the population. In the old days of plague they were its first and most numerous victims, and they still suffer from pulmonary diseases to an extent unknown among natives and resident Europeans. Few black slaves, indeed, reach middle age, ten or a dozen years generally sufficing to sweep away a generation, at the end of which the whole have to be replaced. Black slave children, too, as well as white, born in the country, mostly die early, and consequently contribute little or nothing to maintain the class. In this double fact lies the vitality of the trade that recruits the service, in spite of its legal abolition some years ago. The most the Government has been able—or has perhaps desired—to do has been to abate the cruelties of the traffic within Egyptian territory, to prohibit—*i.e.*, minimise—the import of slaves by the Nile, and to close the public

slave-markets in Cairo, Alexandria, Tanta, and other towns of the interior where, till within a few years ago, the trade was openly carried on. To effect the first of these results the old *gazzuas*, or slave hunts, which even in Abbas Pasha's time were regularly organised by Government officers in Upper Nubia and the Soudan, have been put an end to, and kidnapping is now believed to be practised nowhere within the limits of established Egyptian authority, except in the southern districts of Sennaar and Kordofan, where the Khedive's firman is powerless to completely stamp out a traffic which has formed a staple industry in all these regions since history began. The chief sources of supply are now, therefore, the great oasis of Darfour, the Shilook country, and the districts south of it watered by the Bahr-el-Gazel, the Sobat, and the Upper White Nile, over most of which the authority of the Cairo Government is as yet only nominal, and powerless, consequently, to prevent the razzias which feed this cruellest of human traffics. After a long desert journey the caravans from Darfour strike the Nile either at Shendy or Dongola, according as they are intended for Souakim and the Hedjaz, or for Egypt proper. Those from the south-east embark at various points above Khartoum, and after voyaging down as far as Halfé or Shendy, cross the so-called desert of Bahiuda to Old Dongola, where they again take to the river. In the case of the whole the sufferings and consequent mortality of the victims before they reach the Nile are very great, and form, indeed, the main argument against an institution which, however mild in its subsequent working, is condemned in advance by these antecedent horrors. But once within the jurisdiction of what may be called the Nile police, the condition of the captives becomes

fairly tolerable. Even in these remote provinces the trade is nominally illegal, but the law is a dead letter, and the authorities directly control and profit by the traffic. Care is accordingly taken that the slaves are not unduly packed in the large *noggurs*, or cargo-boats, which transport them down the river, and that they have a sufficiency of food and water. Below the First Cataract, however, the law becomes operative, and thence down to Cairo the importation is strictly contraband; but by this time the numbers have been greatly thinned by sales *en route*, and the small "parcels" that remain are easily enough smuggled into Boulak, or landed a few miles higher up. Very few, it may be here remarked, reach Cairo by way of the Red Sea, as nearly all who are sent to the east coast are shipped across to a ready market in the Hedjaz.

Once in the capital the dealers (*djellabs*) distribute their stock among their agents in various quarters of the city, and there, although the police are supposed to be on the watch to prevent it, buying and selling go on under the thinnest veil of concealment. An intending purchaser goes to one of the private but perfectly well-known entrepôts in which the dealers and their slaves are lodged, and after examining the latter, selects what suits him, haggles for a time about the price, and finally closes the bargain then and there, or subsequently through a broker, who receives a small commission for the job. The *djellabs* object to show their ware to Europeans, unless they be introduced by a native who is not merely a dragoman; but with that voucher and the thin disguise of a fez and a Stamboulee coat, a sight of whatever is on hand may be easily enough had. Franks are, of course, now forbidden by their own laws to buy or hold slaves, but the prohibition

is not always regarded by residents in the native quarters of the city, where, indeed, a single man cannot hire a house nor obtain lodgings unless he have a female slave. Prices range from 10*l.* or 12*l.* for a black boy or girl of as many years old, to 70*l.* or 100*l.* for an Abyssinian girl of from twelve to seventeen or eighteen, and from 500*l.* to 800*l.* or even 1,000*l.* for a high-class Circassian. Adult women slaves who have already been in service are cheaper, unless their skill in cookery, needlework, or some other useful art, balance the vice of temper or other defect, but for which they are rarely re-sold. The price of males above the age of childhood varies from 20*l.* or 30*l.* to 90*l.* or 100*l.*, Abyssinian youths and men ranging considerably above negroes. The neutral class of eunuchs has a still higher value, but these are now found in only the very wealthiest Moslem families, the rigorous prohibition which the law enforces against their production within Egyptian territory having greatly reduced the supply, and correspondingly heightened their price. Till within a few years ago boy slaves were bought on their way down the Upper Nile, and mutilated at Assiout and some other stations —Coptic priests being amongst the most expert operators —but this practice has now been suppressed, and the whole of the small yearly importation comes ready-made from Kordofan and Darfour. Most of the few who reach Cairo are bought up for Constantinople, where no Turkish "gentleman's" establishment is "complete" without one or more of these neutral police. It may be added that the whole of the slaves imported into Egypt readily adopt the established faith, and soon become the most bigoted and fanatical section of the Moslem population.

Such, briefly noted, are the chief conditions of

slavery in Egypt. How widely they differ from those of the institution whose horrors fired our English abolitionists in the beginning of the present century, and twenty years ago thrilled both Europe and America in the pages of "Uncle Tom's Cabin," need not be repeated.[1] The one is, in short, simply domestic servitude under practically efficient guarantees against ill-treatment, while the other was the cruellest form of tyranny that man ever exercised over his fellow. But the two systems have this in common—that the same initial cruelties are and were necessary to feed both. This is not so, of course, as regards the white slaves, who are freely sold by their parents, and are themselves consenting parties to the bargain. In their case only the ethical sentiment of Christian as opposed to Mohammedan civilisation is offended; and an apologist of the institution might plausibly enough contend that this incident of it is vastly less immoral than the promiscuous "social evil" which, while sternly reprobated by Moslem law and public feeling, flourishes under police license and almost with social sanction in Europe. It is different, however, with the more numerous class of black slaves, the victims of organised kidnappings and petty tribal wars as cruel as any ever waged on the West Coast; and the sufferings of these it is, during their capture, and till they reach the Nile, which condemn even the mild domestic servitude that must be supplied at this price as absolutely as the brutal exaggeration of it which fifty years ago cursed our own colonies and the United States. If the class were self-recruiting the

[1] "It must be borne in mind that it is a mild and harmless traffic as compared with slave-trading in other parts of Africa; and that domestic slavery in Egypt presents few of the horrible features which have been witnessed in other parts of the world."—Report of Mr. Beardsley, U.S. Consul-General at Cairo (1873).

case would be very different; but dependent as it is on barbarities to which every African traveller from Bruce to Schweinfurth has borne witness, civilisation pronounces against it the same fiat of extinction that abolished slavery in the West. Egypt, it is true, is only in part answerable for these atrocities in the remote interior, the spoils of which find markets equally at Zanzibar, in the Hedjaz, in Tripoli, Tunis, Morocco, and Constantinople; but her share in the responsibility is still heavy enough to furnish unfriendly critics with a plausible argument against Egyptian civilisation, and the credit of the Cairo Government is therefore directly staked on the complete suppression of this traffic. That the Khedive is fully sensible of this is shown by the efforts he has already made to reduce it to the narrowest limits; and, having done this, his determination to put an end to it altogether may be inferred from the enlarged powers he has conferred on Colonel Gordon to crush it everywhere between the Second Cataract and the Equator. No ruler of Egypt could do more than to entrust such a commission to such a man.[1] But even with Gordon Pasha in the Soudan, and the Khedive in Cairo, the suppression of the trade and of the institution it keeps alive must needs be slow. Custom and religion have too long consecrated both, for any human power to at once stamp out either. With the gradual suppression, however, of slave-hunting and selling in Darfour and along the Upper Nile, black slave-holding

[1] In a recently published letter on the subject of his new commission, Col. Gordon says:—"I am astounded at the powers he (the Khedive) has placed in my hands. With the Governor-Generalship of the Soudan, it will be my fault if slavery does not cease, and if these vast countries are not open to the world. So there is an end of slavery if God wills, for the whole secret of the matter is in the government of the Soudan, and if the man who holds that government is against it, it must cease."

in Egypt proper must perforce die out; and with the withering of that main trunk of the institution the rest will speedily disappear. In the meantime, while this social revolution is being effected, Egyptian legislation and public sentiment may be fairly credited with having minimised the evils which are inseparable from slavery even in its mildest form.

CHAPTER XVI.

FAUNA AND FLORA.

The Camel—The Ass—The Horse—The Ox—The Buffalo—Sheep and Goats—The Pig, "Unclean" to Christian, Moslem, and Jew—Dogs and Cats—Indigenous Wild Animals—Crocodiles and Hippopotami—Abundant Ornithology—Tame Fowl—Wild Fowl—Ophidians—Fish—Native Trees less numerous than Animals—Palms—Sycamores—Acacias—Tamarisks—Poplars—Cypresses—Mulberries—Olives—Exotics very numerous—Their Varieties.

THE importance of a few of their respective types warrants a brief chapter on the animals and trees now most commonly met with in Egypt.[1]

Amongst the former, the *camel* ranks first as, next to the date-palm, the most characteristic feature in the whole natural panorama. From the sea to the cataract, this most eastern of animals meets the eye everywhere; stalking with long noiseless stride, cargo-laden, through the narrow streets of Alexandria near the harbour; or inland, yoked singly with buffalo or even donkey to the plough; or yet again higher up, wending their way in solemn file along the high river-bank between Cairo and one or other of the stations at which the great southern caravan routes strike the Nile. The common Egyptian camel is the two-humped Bactrian variety, called by the Arabs *djemmel*, and is much taller and stronger than the more graceful *hadjim*, or one-humped

[1] The reader who cares for exhaustive information on this subject may be referred to the chapters contributed by MM. Coquebert, Savigny, and Geoffroy Saint-Hilaire to vols. xix., xxiii., and xxiv. of the *Description de l'Egypte*, and to Captain Shelley's beautiful *Handbook to the Birds of Egypt* (1872).

dromedary, which is only used to carry single riders on rapid journeys across the desert. The chief breeders of the animal are the Ababdeh Bedoween, who share with the Bisharis the great Eastern wilderness south of Kenneh, and provide cattle for most of the caravans on both sides of the river. These *djemmel* camels usually carry a load of six hundredweight, and, though fed for three-quarters of the year on nothing better than chopped straw and an occasional handful of beans, they are good for eighteen or twenty years' hard work. It is noteworthy that, although the camel was known in Egypt in the time of Abraham, no trace of the animal is found in any of the antique paintings or sculptures. This does not, however, prove that it was even rare in the country, since fowls and pigeons, which abounded from the earliest ages, are equally absent from the monumental records of farmyard stock.

The *ass* is the next most prominent feature in Egyptian animal life. In the field, the constant fellow-worker with the camel, the buffalo, and the ox, he is, out of it, the universal mount of both rich and poor. Between, however, the lordly white or cream-coloured Mecca donkey—as large and powerful as a mule—and his puny, ill-fed, over-worked relative at the other end of the asinine scale, the difference is as great as between the portly Bey or Effendi who ambles past on the one, and the half-naked fellah bestriding the bare back of the other. Their market value, too, is proportionate—the one costing as much as 100*l.* or even 150*l.*, while the other may be bought for nearly as many piastres. The low-caste animals are, of course, far the most numerous; but even of them some fine specimens, ridden by less wealthy owners or plying for hire, may be seen in Alexandria and Cairo, where—especially

since last year's destructive epidemic amongst horses, which both mules and asses escaped—these last now carry three-fourths of the street passenger traffic. The best of these low-caste donkeys are bred in Upper Egypt.

The modern Egyptian *horse*, which is seldom seen out of what may be called the two capitals, is a poor specimen of his race, and suffers from his double competition with the ass and the camel. Within the past few years, however, the Khedive has made successful efforts to improve the breed by crossing it with English blood, and up till the epidemic of last autumn he maintained a fine stud near Cairo, which had already in this way supplied a large number of excellent cavalry mounts. But the mysterious malady swept away nearly the whole, and in little more than three months destroyed, it was estimated, 500,000*l.* worth of horses between the mid-Delta and Upper Egypt. His Highness' own stables, as well as his sons, were almost completely emptied; and for a time Prince Mehemet Tewfik, the heir-apparent, might be seen jogging in every morning to his Ministry of the Interior astride an ambling *hemâr*. Barley and clover being indispensable to the Egyptian horse, the dearness of his keep precludes his employment for agricultural work; and except, therefore, for the better class animals which are fit for saddle or carriage use, the price ranges little higher than for a good (common) donkey or mule. This latter itself is in great local request, and shares with the high-class Hedjaz donkey the honour of mounting the wealthier old-fashioned grandees.

The once divine *ox* has sadly degenerated since a single specimen of his kind sufficed to fill one of the huge sarcophagi that excite the wonder of the visitor to

the Apis mausoleum. Hard work and bad food, however, sufficiently account for this decadence; and now, never pampered nor rose-wreathed, except when a French butcher in Cairo stall-feeds and bedecks a single victim for the sacrifice of *mardi-gras*, he toils three-fourths of the year at the plough or the water-wheel, and ends an unhonoured life by turning into such beef as is seldom met with out of Egypt. It is but fair to add that most of the present stock is not indigenous, but descends from the large importation from Turkey and Bessarabia which followed the desolating murrain of 1863–4.

The *buffalo* of the Delta and Nile Valley, though hardier and heavier than its bovine relative, has few features in common with its huge wild namesake of the American prairies. It is almost hairless, of a dark slate colour, and with its low-humped back, reflexed horns, and savage-looking face, is the ugliest, yet in reality one of the gentlest, of Egyptian animals. Its milk, besides being largely used fresh, also supplies most of the sour cream (*yáourt*) that forms a common article of fellah diet, and in the absence of wheel-carriages, its chief work, like the ox, is at the plough or the *sakkia*.

As *sheep* and *goats* herd together, and differ but little in size, colour, and coat, they may be here conjointly mentioned. Both are very prolific, the gross total of a year's lambs and kids exceeding 800,000—the sheep especially lambing twice in the twelvemonth, with usually two at a birth. Of these latter the breeds differ, according as the rams were from Barbary, the Sennaar, or the Hedjaz. The first of these three varieties is the most numerous, and is of the mouflon type, with a heavy fat tail, a long bushy chin-tuft, and a thick but coarse oily fleece of wool. Their horns are large, with a triangular base, and rounded angles

terminating in a sharp point. The goat abounds most in the Delta, where the commonest breed is of Syrian origin. The type of the animal in Upper Egypt is smaller, with an abundant fleece of long silky hair, resembling that of the Angora goat. In both sections these animals supply the greater part of the milk and butter used in the country: the former is good, but of the latter, as made by fellah dairy-women, the less said the better. As the food of both animals is the same—the weeds and dry acrid plants on the edge of the desert—the flesh of both has the same rather sour flavour, but is still superior to that of the Syrian sheep, which is largely imported and sells at a lower price.

The *pig* in Egypt is as "unclean" to all delicate-stomached Christians as to the Moslem or the Jew. It divides with the dog and the kite the scavengering of the towns, and what even the *kelb* refuses as too filthy to be eaten the *khanzir* ravenously devours. In this respect 3,500 years—when, in the 18th dynasty, the animal first appears in the sculptures—have but little improved either its habits or its local repute as an article of food. "As well," says a recent writer, "might you dine on a rat taken from a sewer, or a vulture caught in the ribbed cavity of a camel it was busy in eviscerating. It were all one to sup with the ghools." No chemistry of nature can, in fact, transmute the filth on which the Egyptian pig generally feeds into fit nutriment for man; and even the least nice of foreign tourists, therefore, will do well to avoid pork at a Cairene *table d'hôte*. It is chiefly killed and offered for sale by Greek butchers, whose co-religionists do not so generally share the prejudice which the Copts feel quite as strongly as either Arabs or Jews to the flesh of this animal.

The *dog* completes the list of the larger domesticated animals of Egypt, where, as throughout the East, he is also regarded as unclean, though in a much less degree than the swine. In Alexandria and Cairo, as in Stamboul, these animals segregate themselves into sets belonging to each "quarter," and woe betide the cur of one *toum* who adventures into another. A similar geographical antipathy divides the town dog from his country fellow, who, nearly as savage as the wolf or the jackal, hovers in packs on the borders of the desert, and lives mainly by nightly forays on stray cattle, or anything that can be picked up round the villages. The two septs strictly respect each other's boundaries, or, if an individual does not, he pays the penalty of his skin, or even his life, for the trespass. As a rule, European dogs do not thrive in Egypt; but where they do become acclimatised a bull-terrier, or even a pointer, scatters these native pariahs from his path almost as easily as Gulliver might have cleared his way in Lilliput. There is, however, a race of large rough-haired dogs near Thebes, who are celebrated for their fierceness and courage.

The domestic *cat*, anciently sacred to Pasht, is still treated with especial kindness in Egypt, but the hospitals founded by Moslem piety for its care when sick or destitute have fared even worse than most other charitable foundations, and the garden or court-yard of the Cadi's house is now, as it was forty years ago, when Mr. Lane described this kindly trait of Egyptian character, their only legitimate refuge.

The indigenous wild animals of a country which offers so little cover and feeding-ground as Egypt may be counted almost on the fingers of one hand. The crocodile is now seldom seen below Girzheh, more than

300 miles above Cairo, and the hippopotami still move rarely below the Fourth Cataract; while on land, the hyena, the jackal, the fox, and (on the borders of the desert) the gazelle, are the chief mammals worth mentioning. Of smaller types only the hare, the ichneumon, the rat, and two or three different varieties of the lizard —the bigger specimens of which are often palmed off on travellers as young crocodiles—are the only examples that need be noted.

If the native mammalia of Egypt, however, are not numerous, its ornithology is abundantly rich. A recent writer catalogues more than a hundred species which fell under his personal observation during a Nile voyage,[1] and in the works previously referred to in a foot-note, nearly two hundred more will be found scientifically described. Such a wealth of feathered life cannot be even sampled in so cursory a notice as the present. It may, however, be said that the chief profusion is to be met with in Lower Egypt; although in the Saïd, the district between Beni-hassan and Esneh, and the great plain of Edfou, also teem with bird-life in swarming variety. Of tame fowl, the hen, the duck, the pigeon, the goose, and especially the turkey, abound everywhere; but of the whole of these it may be remarked, as indeed also of almost all the mammalia common to Egypt and Europe, that they are smaller in the former country than with us. Thus an ordinary Egyptian hen is not much larger than a French or English pullet, and her eggs little more than half the size of those of our own barn-door cacklers. The once sacred ibis still abounds, and in the marshes of the Delta pelicans and flamingoes are nearly as plentiful as plovers on the Nile shallows, and wherever creeks have

[1] Smith's *Attractions of the Nile*, ii., 197—298.

been left inland by the subsiding inundation. Snipe, sand-grouse, and especially quails, are also abundant—these last on their annual flight north in winter and early spring, when they are netted and shipped alive by thousands to Europe—while of aquatic birds the sportsman will find a very *embarras des richesses.*

Few or none of the larger ophidia are met with in Egypt, but the asp, the common and horned snakes, and the small spotted viper—all more or less venomous—are in plenty. They abound on the borders of the desert, but seldom approach the towns or villages, into which, however, the hardly less venomous scorpion and a species of black tarantula penetrate freely, hiding in fissures of the walls or under the floor-matting. The performances of serpent-charmers, though less common than formerly, are still not obsolete; but the fangs of the snakes played with are in every case extracted. This is done generally by pinning the reptile to the earth when caught with a forked stick, and teasing it with a piece of strong woollen cloth, at which it bites, and which is then jerked sharply back, breaking the teeth and destroying the poison-ducts.

Fish abound in the Nile, the Birket-el-Korn, Lake Menzaleh—with the salted produce of which a considerable export trade is carried on with Greece and the Levant—and one or two of the larger canals, but, as compared with those of the sea, they are generally insipid, and, in the case of the numerous unscaled varieties, unwholesome. A few however, such as the *bultee*, the *shall*, the *kishr*, the *binee*, and the *karmoot*, are more delicate. Alexandria and the neighbouring coast consequently supply the greater part of the fish sold there and in Cairo.

Lastly, though not least in practical interest to

foreign residents or travellers in the country, during three-fourths of the year, flies, mosquitoes, fleas, and other insects of prey—though these last less profusely in the better class houses—swarm everywhere, from the mud huts of the fellahs to the *salons* of Abdeen. Whether Moses introduced these special plagues or not, they have survived all the "dynasties," and are as irritantly active now as when Pharaoh Menephtah hardened his heart and would not let the Israelites go. Use, however, seems to have rendered the natives indifferent to all three, but to foreigners they are a very sensible drawback on the pleasure of residence in or travel through the country, from Alexandria up to Nubia, where, strangely, fleas are as rare as snakes in Ireland, and hardly trouble you at all out of your own dahabeeyah.

The native plant-life of Egypt is much less rich in variety than its animals. The purely indigenous trees, indeed, hardly exceed half a score. Among these the *date-palm* holds the first place for number, usefulness, and beauty. Like the camel, it is seen everywhere—singly, in clumps, or in great groves large enough to be called forests.[1] There are no fewer than twenty-four varieties of this tree, which are, however, grouped into three categories distinguished by the size, shape, and especially the colour of their fruit; and by the Arabs it is also further distinguished as being of two genders, the male called *dakar* and the female *entayeh*, the generic name of the tree itself being *nakhleh*. It needs no culture, but the best fruit is obtained by those that are watered

[1] Chiefly in eastern Lower Egypt: one also grows over buried Memphis, and another at Birket-el-Haggi, below Heliopolis, where took place the battle between the Turkish Grand Vizier and General Kleber, which ended in the great French victory known by the latter name.

at the base and pruned once a year of the lowest of the five or six rings of long feathery leaves that spread out, fan-like, from its top. In Upper Egypt, where the best dates are grown, the rich clusters of fruit—in shape not unlike huge bunches of grapes—begin to ripen towards the end of June, a month earlier than in the Delta. They are gathered while still not quite mature, and allowed to fully ripen afterwards off the tree. The average yield per tree is about four cantars a year. Besides forming, while fresh, a chief article of peasant diet, especially in the Saïd, the dates are also dried and kneaded into a sort of bread, for consumption during the other months of the year. Nor is it the fruit alone of the tree that is valuable: its leaves are worked into mats and baskets; the fibrous sheaths which attach them to the tree into brooms, and various sorts of cordage; its branches, stripped of the leaves, into roof-coverings, bed-frames, fowl-crates, and chairs; the trunk itself, which is only cut down when it ceases to produce, serves for house-building and many other purposes; and, finally, the very date-stones are used to feed the camels and for fuel. The *doum-palm*, which grows only in Upper Egypt, differs materially from the other tree, in that its bark is smooth, and that a few feet above the ground its trunk divides into two main branches, which again bifurcate; and this is repeated till the whole becomes, in fact, a cluster of trees on one stock. Its fruit also, of which there are two growths a year, is enclosed in a reddish husk, and is much larger, but less delicate than that of *nakhleh*.

The *sycamore* (Arab. *gimmis*) is in girth the largest of Egyptian trees, specimens of it from twenty-five to thirty feet in circumference being sufficiently common. Its trunk, on the other hand, is short, and its branches

spread out almost horizontally, forming with their thick evergreen foliage an impervious shade from even a Cairene sun. The beautiful avenue on the Shoubra road is composed of these trees and acacias, which, arching and interlapping overhead, form a splendid natural gallery nearly four miles long, that even in midsummer affords the cool gloom of a cathedral cloister. Sycamore-wood is rot-proof, and in old times was therefore much used for mummy-cases. It is now chiefly employed in the construction of gun-carriages and water-wheels. A coarse kind of fig grows upon the trunk of the tree, but does not ripen unless cut.

As the sycamore is the largest, so is the broad-podded *acacia* (Arab. *lebbek*) the prettiest native tree of Egypt. It is also an evergreen, and, as it grows rapidly if well watered, it has been largely planted round the new villas and along the boulevards which within recent years have so modernised Alexandria and Cairo. What the sycamore, too, has done for the Shoubra road, this tree is fast effecting for the long causeway from the Nile bridge to the Pyramids, which is already nearly as completely shaded for more than half its length by a double row of fine thriving *lebbeks*.

The *Acacia nilotica*, or thorny small-leaved acacia (Arab. *sant*), a congener of the last, is found almost everywhere, but attains its finest development in Lower Egypt. It gives but little shade, but its wood is in great request for boat-building, and its fruit, called *carat*—which does not however grow abundantly below Thebes—is valuable for tanning. In the desert between Cairo and Suez it also exudes a fragrant gum, which is much esteemed by the Arabs. There is another species of the acacia, called in Arabic *fetneh*, which flowers from December to March. It attains the height of

about twenty feet, but is seldom met with out of gardens.

The *tamarisk* (Arab. *tarfeh*) is a hardier tree than any of the preceding, requiring but little moisture, and producing a thick foliage, nearly equal in shade-value to that of the *lebbek*. It is commonly grown round water-wheels, and its wood is mostly converted into charcoal, its fruit being utilised for dyeing and tanning.

White and black *poplars* are also grown in Lower Egypt, but as they afford no shade, and their wood is of little value, they are not much propagated.

Cypresses (Arab. *saroû*) are more numerous, and not being in Egypt, as in Europe, symbols of sadness, they are much grown as garden ornaments, singly or in avenues.

Black and white *mulberry-trees* (Arab. *toud*) abound in eastern Lower Egypt, where the leaves of the latter are gathered for silkworms, and the fruit of the former for sale as a favourite article of fellah diet in the season. And finally,

The *olive-tree* (Arab. *zeytoun*), which chiefly flourishes in the Fayoum. Mehemet Ali gave a great impulsion to the culture of this tree, but except in the province named, it is not now very largely grown. Its fruit here is coarse, and though good for oil is not much eaten.

These are the native trees most commonly seen in Egypt. Of alien, but now perfectly naturalised species, the number is legion, especially since Mehemet Ali cultivated the splendid gardens of Shoubra, and Ibrahim Pasha similarly converted the island of Rhoda into a nursery of the finest native and foreign trees and plants. The efforts thus made to extend and improve the flora of the country have been continued by the Khedive, with the result that the gardens of his Highness'

palaces, and those of many private proprietors, both at Alexandria and Cairo, are now rich in nearly every variety of tropical and sub-tropical shrubs, which in this bright winterless climate thrive as luxuriantly as in their native soil. Of fruit-trees may be mentioned —the banana, which flourishes best in Lower Egypt, flowering in October and November, and producing the long luscious fruit so dear to vegetable *gourmets;* the fig-tree, in three varieties, whose fruit, if not equal to its Smyrna congener, is still good; the Indian fig, a species of cactus, valued also for its fruit, and which forms pretty and effective hedges; the pistachio, abundant and very productive; the orange and lemon, also very plentiful, and the former, especially in the Delta, producing excellent fruit; two varieties of the pomegranite, the fruit of one of which is deliciously sweet, and that of the other slightly bitter; the guava, as productive here as in its natural tropics; the vine, not a great success, and chiefly cultivated for its raisins, of which one variety equals the best Turkish *sultanas*; the walnut, excellent for the quality of its wood, but not producing much or good fruit, a remark that applies also to the cherry-tree; and finally, the almond, the pear, the peach, and the apple, which, if not equal to the best varieties of their European namesakes, contribute their fairly good quotas to the abundant fruit-crops of the country.

CHAPTER XVII.

CLIMATE.

Generally, Dry and Hot—Considerable Difference between Coast and Interior—No Real Winter in Egypt—The *Khamsin*—Mean Summer Temperature at Cairo—Scarcity of Rain—Climate of the Isthmus—Mean Annual Rates of Temperature—Regularity of the Wind—Egyptian and European Death-rates—The Nile Valley anciently Famous as a Sanatarium—Testimony of Rev. A. C. Smith—Corroborated by Drs. Dalrymple, Patterson, Walker, Zagiel, and Pruner—Endemic Diseases—Improving Sanitary Administration—Consensus of Medical Opinion in Favour of Egypt as a Health-resort.

THE acknowledged value of Egypt as a health-resort suggests some notice of its climatic peculiarities, which, although less markedly, have still in common with many other features of the country undergone some sensible changes within recent years.

Subject to considerable local qualifications, the climate of Egypt may be generally described as hot and dry. The description applies least perfectly to the lower Delta, the situation of which, along the sea, greatly tempers the elsewhere general heat, and at the same time gives to its atmosphere a degree of moisture which is unknown in the Middle and Upper provinces.[1] Thus in Alexandria, where there is an abundant rainfall between October and February, the thermometer seldom ranges above the average of Southern Europe, and even in the dog-days keeps fairly down to "temperate." In Cairo and throughout Middle Egypt, the rain diminishes to slight showers on eight or ten days a year, and the mean temperature of the twelvemonth is nearly 3°

[1] According to Dr. Pruner, the moisture of Alexandria is *one hundred and fifty-two* times that of Cairo.

higher than along the coast; while in Upper Egypt rain is an almost unknown phenomenon, and the heat, which during the summer months is intense, never cools below a point that excludes winter from the list of Egyptian seasons altogether. In Alexandria, and more rarely in Cairo, European residents sometimes light a fire during December and January; but in neither city is there, in our Western sense, properly any winter at all. Spring, summer, and autumn are, in fact, the only seasons known to the whole land of Egypt.

The first of these begins in February, when the fruit-trees blossom and the atmosphere gradually acquires a delightful warmth. It is, however, during this otherwise charming season that occurs the hot *khamsin*[1] wind whose distinctive effects have gained for it a bad renown among atmospheric phenomena. This wind, or rather series of winds, which the Arabs also call *simoom*, blows intermittently from the end of March till the middle or third week of May. It comes from the far south, or more exactly SSE., and after traversing the burning sands of Africa at a time when the sun's rays fall almost perpendicularly, it reaches Egypt laden with all the noxious vapours of the desert. On its approach, the sky, normally so blue and cloudless, becomes black and heavy, the sun darkens into a dim violet-coloured disc, and what is at first but a light warm breeze rapidly increases into a blast hot and dry as from an oven, which shrivels up every green thing, warps and cracks wood,

[1] So called from the *fifty* or more days during which it blows at frequent intervals. The name *simoom* (poison) is more especially given to its hottest blasts, which seldom last more than a quarter of an hour or twenty minutes. A very vivid description of this latter will be found in the first chapter of Mr. Palgrave's *Central and Eastern Arabia*. In Egypt, however, these hot winds have within recent years been much less frequent, and their action less severe than formerly.

renders breathing difficult, and is generally hurtful to both vegetable and animal life. Happily this pernicious sirocco lasts only from twenty-four to forty-eight hours at a time, during which all out-door work is suspended and the inhabitants confine themselves to their houses, and vainly endeavour to shut out the fine unpalpable dust that fills the air, and, according to the Arab saying, is so penetrating that it will enter even an egg through the pores of its shell. These are the winds which in the unsheltered desert have so often proved fatal to whole caravans, and more than once to entire armies. They are not however peculiar to Egypt, but blowing from different points occur also in other parts of Africa, in the Syrian desert, the Arabian peninsula, Babylonia, Persia, and southern India. It is at the same time remarkable that this southerly breeze so perniciously hot in spring, is during the winter months the sharpest and coldest that blows — the reason being that in December and January the solar rays fall more obliquely on the desert, and the wave of air which then descends on Egypt is chilled by its passage over the snowy highlands of Abyssinia.

Hardly has the last hot breath of the *khamsin* swept away northwards towards Constantinople—which it reaches tempered by the Mediterranean, but still most unhealthily warm—than the Egyptian spring at once ripens into summer. In Upper Egypt the heat then becomes trying even to the natives, and almost unbearable by Europeans. Lady Duff Gordon, however, testifies that even as far south as Thebes, by taking proper precautions and excluding light and air during the hottest hours of the day, as is the universal rule in all tropical latitudes, she suffered no inconvenience from the heat. At Cairo, the mean summer temperature is

about 92° Fahr., but it sometimes, though rarely, ranges ten and even twelve degrees higher. But this latter extremity of heat is seldom experienced except in the more confined districts of the Saïd, which suffer also from the absence of the heavy dews that nocturnally irrigate the parched surface of the Delta and Middle Egypt. The northerly summer breezes waft in the evaporations of the Mediterranean, and these, suspended in the atmosphere during the day, are deposited at night in an abundant dew that moistens and cools the air, and in the morning again evaporates in light flaky clouds.

The summer may be said to last till the last week of September, when even in the Upper Valley the heat ceases to be inconvenient, and the long genial autumn, which extends throughout our European winter, begins. For the first five or six weeks of it, light easterly winds prevail, which render the continuing warmth damp and muggy, and make this the most unhealthy period of the Egyptian year. But thence on till February the climate is everywhere delightfully mild, and in Upper Egypt balmy beyond anything known elsewhere in northern latitudes. In the Delta, as has been mentioned, it rains frequently and heavily during these months, but the mean general temperature of the season is only 12° or 15° below our English summer heat, and the air is everywhere dry and invigorating except in immediate proximity to the sea. It might have been expected that the great number of trees planted by Mehemet Ali, and the constantly extending area of the canals, would have largely increased the rainfall inland, but a comparison of the meteorological observations taken during the French Expedition with those more recently made shows that there has been no sensible augmentation.

Thus, between 1798 and 1800 inclusive, the number of days on which rain fell averaged fifteen; while between 1835 and 1839 the average was twelve, during which time the actual fall was reduced from 0.69 inches in 1835, and 0.38 inches in 1836, to 0.60 inches, 0.44 inches, and 0.12 inches in 1839. In 1871 the number of rainy days in Cairo was nine, during which it actually rained only 9 hours 8 minutes. At Alexandria the mean for the three years 1847–8–9 was 7.50 in. against 8.92 in. for 1867, 13.18 in. for 1868, 6.22 in. for 1869, 2.86 in. for 1870, 6.61 for 1871, and 11.14 in. for 1872. In the Isthmus of Suez, however, the climate has been sensibly modified by the opening of the Canal and the extension of cultivation along it, the summer being now cooler and the winter warmer than even ten years ago.[1] This improvement in the temperature of the Isthmus is attributed to the infiltration of water into the less elevated parts of the desert, but it is also no doubt largely owing to the vegetation which has sprung up along the banks of the Canal, and over the broad belt of reclaimed land which is now irrigated by the fresh-water canal.

The nearly constant regularity of the temperature is shown by a comparison of recorded observations extending, at intervals, over more than a century. Thus, an analysis of Niebuhr's observations from November, 1761, to August, 1762, gives the following mean rates for those ten months:—

	Deg.	F.
1761—November	67	78
December	58	16
1762—January	56	21

[1] During the first years of the work on the Canal, before the water was admitted, the mercury twice fell below zero, a degree of cold which has not occurred since.

	Deg.	F.
February	58	0
March	66	61
April	69	61
May	77	6
June	79	77
July	85	82
August	88	42

A similar analysis of the record kept at Cairo by the scientific staff of the French Expedition (as given by Clot Bey in centigrade degrees) shows the following for 1799 :—

	Deg.	C.
January	13	3
February	14	0
March	17	5
April	22	2
May	24	3
June	28	6
July	30	2
August	29	0
September	28	3
October	22	7
November	18	8
December	16	2

Nearly forty years later the observations of M. Destrouches, a medical officer in the service of the Viceroy, gave the following annual means for the five years 1835-9, also in centigrade degrees :—

	Deg.	C.		Deg.	C.
1835	22	4	1838	22	4
1836	22	0	1839	22	1
1837	23	0			

or a mean for the whole five years of about 22° 4′ C., equal to 70° Fahrenheit, which, it will be seen, corresponds closely with the result of the register kept at H.M. Consulate, Cairo, during 1870-71-72, when the

following monthly averages for the three years were recorded :—

	Deg. F.
January	54
February	54
March	63
April	68
May	80
June	84
July	85
August	86
September	82
October	73
November	66
December	59

or a mean temperature throughout the period of about 71° Fahr. A similar register kept at the Alexandria Consulate during 1873, gives an average of 69$\frac{1}{12}$° for the year.

While these figures may be taken to represent the average daily heat throughout Middle Egypt—itself nearly a mean of the whole country—the night temperature is from 8° to 12° lower, the fall rapidly following sunset and continuing till sunrise. Hygrometrically, the four months of December, January, February, and March, over which Nile tours generally extend, compare with our English summer months of June, July, and August as about 56 to 81; and, generally, the humidity of the atmosphere varies with the winds, being greatest when the wind is N. to NE., less when it is NW. to E., and least of all when S. to SW. It need hardly be said that frost and snow are almost unknown. Hailstorms, descending from the Syrian hills and sweeping across Palestine, sometimes reach the Egyptian frontier, and Consul Stanley reports having seen thin ice on the

pools near Suez, but these are rare incidents which happen only once or twice in a century.

Like nearly all physical phenomena in Egypt, the course of the wind, so variable in our climate, is there almost strictly periodical. In point both of force and duration, the northerly breezes predominate, blowing nearly nine months out of the twelve.[1] They continue with little intermission from May till September, when about the autumnal equinox, they veer round to the east, where they remain for nearly six weeks with only slight deviations. The current then sets north-east, with occasional changes to north-west, followed at intervals during December and January by light southerly gales which, as has been said, are the coldest of the year. Thence on to the spring equinox, the eastern current once more prevails, till, as regularly as the rise and fall of the Nile, the baleful *khamsin* again blows from the south.

A comparison of the Egyptian death-rate with those of the chief European States affords a ready test of the significance of these climatic phenomena. The latest official returns report an average annual rate of 2.64 per cent. for the whole country, against 2.57 for England, 2.80 for France, 3.96 for Prussia, 3.34 for Belgium, and 4.08 for Spain. Cairo however, with a population of 349,883, shows the high rate of 4.66 per cent., and Alexandria, with 212,034, a rate of 4.09, being a difference in favour of the whole country of 2.02 against Cairo, and 1.45 against Alexandria. This heavy adverse balance against the capital may, at first sight, seem strange, in view of the admitted healthiness of its climate, and the immense recent improvement in its sanitary condition. But it is quite

[1] And thence anciently called "Etesian."

sufficiently accounted for by the proportion of deaths occurring among natives who, for religious or other motives, flock from all parts of the country to Cairo to die, and by the deaths of resident Nubians and Soudanis, amongst whom the comparative cold of Middle Egypt develops pulmonary disease during the winter months. The exceptional moisture of Alexandria and its still very defective drainage equally explains the fatal excess of that city's death returns over the mean rate of the whole country. But Egypt, as a whole, compares favourably with all the States above mentioned, except Great Britain, and as the sanitary science of the country is as yet in its infancy, the climate may claim the chief credit of the fact.

Hence both the ancient and modern celebrity of the Nile Valley as a favourite health resort. Decaying Thebes became fashionable in this way nearly two thousand years ago, when Celsus sent his rich Roman patients to recruit, in its balmy and yet bracing air, the energies shattered by Augustan luxury and dissipation; and modern medical opinion has wholly endorsed the estimate of the Nile climate then formed by the author of the *De Medicinâ*. Of the mass of lay testimony supplied by books of travel, one quotation from a recent scholarly and suggestive work will suffice:—"I unhesitatingly assert," says the Rev. A. C. Smith, summing up the result of his personal experience during a four months' tour in Upper Egypt and Nubia, "that the dry warmth, the lightness of air, the total absence of fog or damp, and the magnificence of the weather, far exceeded my most sanguine expectations. We arrived in Egypt early in December; we left it at the beginning of April, and during the whole

of that long period we never saw a drop of rain, or felt any moisture in the atmosphere; we scarcely ever saw a cloud, but the brightest of skies, the most brilliant of suns, the balmiest of nights, attended us throughout. I do not mean to imply that it never rains in Upper Egypt, though Herodotus says almost as much, and proves the general rule by a single exception, which he calls a strange prodigy, when in the reign of Psammenitus, a few small drops of rain fell at Egyptian Thebes, 'a thing which had never happened before, and had never happened again to his time, as the Thebans themselves testify.' But this is evidently a mistake, as the inhabitants of modern days acknowledge, and as the watercourses in the neighbouring hills prove, and the gutters or gurgoyles in some of the temple roofs clearly intimate; although a shower of rain is by no means a frequent occurrence, and, as I have said, we experienced nothing of the kind during our whole tour. Then in Upper Egypt and Nubia we felt such heat as to many may seem insupportable, and it is to some persons distasteful, but to me was most delightful, even though I took active exercise on shore with my gun in the hottest part of every day. . . . . To myself individually the climate of Egypt has been under Providence of the greatest value; indeed, of such advantage has it proved, that I am reaping the benefit of it now, and so thoroughly set up was I by that winter's roasting that I have been able to remain in England since during the winter months as I had not previously done for years; and I feel bound to record that blessing, as an inducement to others to make trial of the same remedy, which has operated so beneficially for me." [1]

[1] *The Nile and its Banks*, vol. ii., pp. 174, 5, 7.

English and Continental medical specialists bear abundant similar testimony. Reporting the result of a personal investigation made in 1860, Dr. Dalrymple says of the climate above Cairo:

"Day succeeds day in a nearly constant round of bright cheering sun, soft breezes, and blue skies; the heat rarely (though sometimes at noonday) too great to be quite comfortable; the early mornings just cool enough to make the use of a shawl or overcoat wise for those who are not in active exercise. . . . The day passes in quiet enjoyment in the serenest atmosphere; health is drunk in as you glide along, evening comes on rapidly, and again the shawl or overcoat becomes an absolute necessity, not because of absolute cold, but on account of the relative reduction of temperature that then takes place. . . . Here the same conditions may be reckoned year after year. There may be winters in which the cold or heat will be more or less, but the anxious hope of the invalid is never frustrated. The atmospheric phenomena are very constant, and in Egypt you hear little or nothing of that extenuation of the climate which in Italy, Spain, or the South of France so often meets the remonstrant disappointed health-seeker, 'Oh! such a season as this was never known' . . . . The notes taken by me show that the favourable climate of the Saïd is continued, and in some respects improved, in Nubia. The air is much dryer even than in Upper Egypt, and the rapidity with which the reservoir of the wet bulb thermometer exhausted was very remarkable. It is more bracing from its closer contiguity to the desert, and there is far less dew at night. . . . It is scarcely possible to imagine anything more invigorating and life-giving than the air of the desert; there is a dryness and elasticity about it like nothing else; and the sense of renovation when breathing it round the Mokattem hills [near Cairo], or further on in the actual wilderness, is to the languid invalid like a new lease of life."[1]

[1] *Meteorological and Medical Observations on the Climate of Egypt*, pp. 12, 13, 15, 17. This is undoubtedly one of the best recent essays on Egyptian climatology, but it no longer accurately describes either the sanitary or general administration of the country. The sixteen years since 1860 have vastly advanced and improved both; and, with them, the hotel accommodation of which Dr. Dalrymple then so justly complained. In this respect Abbatt's and the Hotel d'Europe, at Alexandria, and Shepheard's, the New Hotel, and the Hotel de Nil, at Cairo, now leave little—except lower prices—to be desired.

A relatively still better authority, Dr. Patterson—for several years in the Egyptian medical service, and now surgeon-superintendent of the British Seamen's Hospital, Constantinople—writes seven years later:

"Extending over so many degrees of latitude, and possessing varied physical peculiarities, Egypt necessarily presents many grades of climate. All observation, however, proves that the whole of Middle and Upper Egypt has only one uniform characteristic, viz., great dryness and purity of atmosphere, and almost total freedom from rain. The seasonal changes are performed with such remarkable regularity, that, year after year, the same conditions of climate may be safely calculated upon. Rain is seldom seen above Cairo, and even there is rare. The invalid has not there to consider how many fine days he may be able to enjoy, as, from the paroxysmal character of the deviations from the general conditions above described, and from their being little frequent, they are not, in a practical sense, to be noted. The freedom from an excess of humidity is a grand feature of the Nile climate, except at the time the river recedes; and, doubtless, to this its health invigorating properties are chiefly due. This dryness renders it very easily acted on by the sun's rays, the application and withdrawal of which produce the very marked differences of temperature so characteristic of the various periods of the day. During the hottest period of summer the morning air is deliciously cool, the same varying range of temperature existing. Thus it is not uncommon during the summer months to have a difference of 20° Fah., more between morning and midday, and 8° higher still between ten and three o'clock p.m.—the hottest period of the day. The changes produced at night by the rapid radiation of the heat from the earth's surface, under a cloudless sky, are well marked in Egypt. The mean yearly temperature of Cairo is generally stated at 73° Fah. My own observations indicate about 2° lower. The thermometer in Cairo seldom falls lower than 40° Fah., but it is often lower on the Nile. January is the coldest month of the year, or, perhaps what is more correct, the latter half of December and the first half of January, as toward the latter half of January there is a gentle and steady increase of the thermometer during the warmer parts of the day. The average of the month of April approaches nearest to the mean temperature of the year. The humidity is, of course, regulated by the rise and

fall of the Nile; and thus explains the discrepancies of authors—some stating November, others December, to be the most humid month. It is at the time of inundation, and when the receding Nile leaves large tracts of country uncovered, heat fogs are common; the mornings then are harsh and cold, and the evening damps prevail to a considerable degree. This condition is also observed in the desert, in the neighbourhood of the cultivated lands, but not to such an extent as near the river. The sun, even there, at about ten o'clock a.m., acquires sufficient power to disperse the fog, and then follows the beautiful serene day so much enjoyed by the invalid. The summer heats are greatly tempered by the pleasant northerly breezes, the Etesian winds, which range from N. to N.E. These winds blow with great regularity after the period of the *khamsin*, or hot winds, till November. . . . . It is many years since a well-marked *khamsin* wind has passed over Egypt, and old residents agree in saying that it is much less frequent than formerly, and certainly much less severe. . . . . After the period of the *khamsin* there is a gradual increase of the ordinary temperature, till the thermometer reaches its average summer height of 95° Fah., with a considerable variation at night and morning. This heat, as already observed, is greatly tempered by the northerly winds, which bring, in the latter part of the season, light and refreshing dews from the Mediterranean. The atmosphere is, however, very dry until about the end of November, when the damps from the lands uncovered by the receding Nile begin to appear. Cairo and its neighbourhood has then a temperature about 70°, and the morning and night variations are not so great, being regulated by the humidity. A register kept on the Nile during a trip to Thebes in November, gives the average daily temperature of the observations, taken at the hottest periods of the day, as high as 78° Fah., while in Cairo a similar series shows 3° higher. Such is the general condition of the climate of Middle and Upper Egypt for the greater portion of the year. . . . . The climate of Alexandria demands a brief consideration. Surrounded by water, it differs in every respect from the other parts of Egypt already described. From November to March, the rain falls in torrents for several days at a time. Many fine days, however, intervene. The mean temperature of the year is below that of Cairo and the Nile, and is much less variable. The moisture also of its atmosphere is vastly greater. Alexandria formerly possessed a great reputation for salubrity, and was much recommended by the ancient physicians

for diseases of the chest. It is probable that the ancient city was not exposed to such deleterious influences as at the present day, and that its climate was modified by a different condition of cultivation and drainage, as it by no means corresponds to its ancient reputation in this respect. Many cases of chest diseases certainly derive benefit from its climate, but they are of a special character. The general character of the climate of Alexandria may be described as being harsher than that of other parts of Egypt, and as unfitted for debilitated constitutions coming from Europe. Invalids returning from the Nile may, however, enjoy with great advantage a few weeks' stay at Alexandria, *i.e.* from about the beginning of April to late in May. The temperature is not then high, nor the humidity excessive. The days are bright and sunny, and the variations of the thermometer not great. The other parts of the Delta correspond in their meteorological phenomena to Alexandria, the temperature being a degree or two higher."[1]

A yet later observer, Dr. Dunbar Walker, writing in 1873, bears similar but still more emphatic testimony:

"I have (he says) after visiting most of Europe, parts of Asia and Africa, come to the conclusion, with many others, that Egypt holds out the greatest advantages. Nice has got its advocates; Mentone is considered by others to be unrivalled in producing a salutary effect on phthisical and other patients. San Remo has been upheld, and seems to be drawing away numbers from her sister towns in the Riviera. Other authorities point to Italy as possessing a climate unequalled by any other part of the world. Spain has been shown, especially the southern coast, to outstrip other winter sanitaria. Sicily, Algiers, Malta, and Tangiers have all their advocates, but weighing all things, Egypt has advantages that far outshine any other winter resort, and will give results never afforded by any other place frequented by invalids, nay, even by any other spot on the habitable globe during the winter months. If Egypt is selected, I can say, that to sufferers from phthisis no climate offers so many attractions as those experienced in Cairo. That the disease is not met with in the town cannot be recorded, but that it is comparatively rare amongst native Cairenes can be asserted. Those amongst whom it is found are generally natives of Nubia or the interior of Africa,

[1] *Egypt and the Nile: considered as a Winter Resort for Pulmonary and other Invalids*, pp. 12—13, 19—20, 34—35.

whose susceptibility to contract the disease is considerable from the reduced temperature from what they have been accustomed to, and the position they hold as slaves. . . . As regards the advantages and drawbacks of a Nile trip for the invalid, we notice, with reference to the increase of temperature, that in the portion of the Nile between Cairo and Sioût, the mean is 2° higher than in Cairo. On the river still higher up, from Sioût to Assouan, it rises another degree, and in Nubia still another degree, so that at the second Cataract we have a mean of 4° higher than in the Delta [Middle Egypt?]. The air is dryer, purer, and more bracing the farther we proceed up the river, and it has been considered that if there is any air or climate in the world that offers advantages for the cure and non-development of phthisis, Nubia possesses it."[1]

These three writers concur in recommending the climate of Egypt as of the highest remedial value, not only in all varieties of pulmonary disease, but also in rheumatic, renal, and brain disorders, and their opinion is strongly supported by Dr. Prince Zagiel, an eminent Russian physician, in his monograph *Du Climat de l'Egypte*, as also by Dr. Pruner, in his *Topographie Médicale du Caire*, and by other Continental specialists.

On the other hand, if the Egyptian climate is thus powerfully preventive and curative of many of our most serious European maladies, Clot Bey enumerates no inconsiderable list of endemic disorders from which our colder latitudes are mostly or wholly free. Amongst these, *plague* formerly enjoyed the bad pre-eminence; but of this terrible scourge, which used to break out epidèmically at nearly regular intervals of six, eight, or ten years, there has happily been no visitation for more than fifty years—partly, perhaps, because of the stricter quarantine enforced against Barbary and the Hedjaz, where it is also endemic, and in both of which it has appeared more than once during that period.

[1] *Egypt as a Health Resort*, pp. 69, 70, 90.

From the Pharaohs to the Viceroys, however, the plague has been one of the strictly native maladies of Egypt; its inducing cause and its treatment have alike baffled medical skill, and it may be doubted if mere hygienic reforms will ever permanently eradicate it. Of the commonly prevalent disorders, *ophthalmia* is the most general and constant, with the result that the population of Egypt offers probably a larger proportion of wholly or half blind than that of any other country in the world. The great strength of the solar rays during the summer months—when the disease is worst—the clouds of fine dust brought down by the hot winds, and the neglect of cleanliness have all been variously assigned as the cause of this distemper; but the first two at least of these surmises are negatived by the facts that in Upper Egypt and Nubia, where the heat is much greater, the affection is very rare; and that in the desert where the *khamsîn* dust equally abounds, it is altogether unknown. Fortunately, this native scourge seldom attacks Europeans, and when it does a few applications of sulphate of zinc will suffice to check and cure it. The vegetable diet of the fellaheen renders *dysentery*—following diarrhœa—another common, and at certain seasons destructive malady, but from this again ordinary dietetic care effectually preserves foreigners. Several varieties of *skin disease*, including leprosy—which appears, however, to be dying out in Egypt, though still very prevalent in its worst type in Crete—are also common amongst the natives; but these, too, rarely or never affect Europeans, and need not be feared by either foreign residents or tourists. The great extension of hospital accommodation in Cairo and Alexandria within recent years has sensibly mitigated the effect of these endemic disorders,

and as the sanitary administration further improves, a corresponding reduction of the national death-rate may be reasonably expected. Even as it is, Egypt, we have seen, compares favourably with the healthiest countries of Europe, and as a resort for foreign invalids offers climatic attractions which a consensus of medical opinion declares to be unique.

CHAPTER XVIII.

THE SOUDAN.

Its Geographical Area—Dongola—Berbera—Taka—Shendy and Halfé—Sennaar—Khartoum—Kordofan—Darfour—The Shillook Country—Darfertit and Donga—Sir S. Baker's Expedition—Colonel Gordon—Successful Results of his First Expedition—His new Commission as Governor-General—Expressed Determination to Extinguish the Slave Trade—The Opposing Difficulties—Antiquity and Wide-spread Sources of the Traffic—Trade of the Soudan—Its Export Routes—Development that may be Expected with Improved Communications—Results already Achieved—The Khedive's Claim on European Confidence.

In Western geography Nigritia, or the Country of the Blacks, comprises the great expanse of eastern Africa between Nubia and the Equator, and westwards anywhere beyond Lake Tchad to the Niger. But the Egyptian Soudan, though covering nearly the whole of this area southward, is bounded westwards by Darfour, extending on the east to the Red Sea, and thence down past Souakim and Massowah, overlapping Abyssinia, to Berbera and Harrar.

Of the great group of provinces thus collectively named, Dongola, the first, is one of the finest; for while its southern districts are within the zone of the annual rains, it is abundantly watered northwards by the overflow of the Nile over an area of nearly fifteen miles, known as the Wady-Jaijar, or great Dongolese plain. Some miles above Old Dongola, the former capital of the province, the river sweeps round to the north-east, and makes what is called the Great Bend, enclosing northward the fine peninsula savannah mis-named in our maps the desert of Bahiuda, peopled by the Hus-

saneeya, Esoo-Arab, Fadneah, and Omeah Bedoween, who rear large flocks of sheep, goats, and camels, and after the rains cultivate considerable tracts of land. In the course of this great curve of nearly 400 miles, the Fourth and Fifth Cataracts are passed, and in lat. 17° 37′ N., in the country of the Berbers, which is also a province of great industrial capabilities, the Nile receives the Taccazé, or Atbara, its largest and last affluent hence to the Mediterranean. From this point northwards, for more than 1,400 miles, not even a rivulet swells the volume of the great stream—"an unexampled instance," says Humboldt, "in the hydrographic history of the world." During this long course it is exposed to the evaporation of a burning sun, drawn off into a thousand canals, absorbed by porous banks and thirsty sands, drunk of by every living thing, and yet, strange to say, it pours into the sea a larger volume than it displays between the Cataracts a thousand miles away.

South-east of Berber lies the fine province of Taka, one of the most fertile portions of Egyptian territory anywhere east of the Nile. It is cultivated throughout, and from Kassala, its chief town, carries on through Souakim a considerable trade with Djeddah and the Hedjaz.

The Atbara gives its name to the extensive tract included within the eastern basin of that river and the fork formed by its junction with the Nile. This includes the provinces of Shendy and Halfé (the ancient Meroë), both of which consist of well-watered tablelands, broken by low ranges of hills, and still rich, now as of yore, in the elements of great material prosperity. Shendy, the chief town of the double province, derives importance from its situation on the caravan route

from Sennaar and the gold countries, and also on that from Darfour and Kordofan to Souakim, through which the Red Sea trade of the southern provinces is still mainly carried on. At Khartoum—sixty miles above the Sixth and last Cataract, if we except the recently discovered falls of Duffli above Gondokoro—the Blue and White Niles (Bahr-el-Azeck and Bahr-el-Abiat) join, the former flowing down north-west from its sources in the Abyssinian hills, and the latter—now recognised as the true Nile—nearly due north from the remote basin of the equatorial lakes.[1] Here begins the northern frontier of Sennaar, which may be roughly described as bounded east and south-east by the Taccazé and Abyssinia, westwards by the White Nile—which separates it from Kordofan—and south by the mountains of Fazoglou. It is for the most part a great undulating plain, increasing in elevation southwards, and, especially near the rivers, abounding in forest. In the neighbourhood of Khartoum the soil is mostly sandy, mixed with Nile mud; but farther south it becomes a deep bed of argillaceous marl, which, though dismally sterile-looking during the dry season, blooms with abundant crops after the autumnal rains. Its inhabitants, of a mixed Arab and Abyssinian race, are much superior to the negro; and, altogether, Sennaar forms potentially perhaps the finest of the Upper Nile provinces of Egypt. Due west, beyond the White Nile, lies Kordofan, much smaller in area, but differing little in its chief physical features from Sennaar. In addition to the tropical rains, it is abundantly watered by wells; so that even in the dry season—from September to April—it presents in a much less degree the

[1] At their junction the Blue Nile is considerably the broader of the two, being 768 yards wide, while the White, or true, Nile is only 483.

parched and barren aspect exhibited by the latter province during the same months. Its cultivable area is roughly computed at about 12,000 square miles, and its population at 500,000, as against respectively 60,000 and 1,500,000 for Sennaar; but such reckoning can at best be only approximate, as no complete survey or census of these regions has been made since their annexation to Egypt.

West again of Kordofân, separated from it by the narrow strip of desert peopled by the Bagâra and Hamrân Arabs, lies Darfour, which was only annexed in 1875, after the brief campaign provoked by the forays of its Ameer across the Egyptian border. This latest addition to the dominion of the Khedive is in reality a large oasis, wholly enclosed in the Sahara, and lying roughly between lat. 10° and 16° N., and long. 26° and 29° E. It has been visited by very few European travellers, and neither its exact extent, population, nor chief physical features are at all accurately known. Its capital is a town called El-Faschir, in about lat. 14° 10′ N., in a plateau about 2,200 feet above the level of the sea. Towards the south the country is hilly, the principal elevation being a mountain ridge called Marrah, which traverses the province longitudinally, and is the source of numerous springs. Southwards it is level, sandy, and except during the annual rains—which begin early in May, and last from two to three months—nearly destitute of water. It produces, however, abundant crops of wheat, millet, rice, maize, sesame, and tobacco. Cotton also is grown, but only in small quantities, as, either from the want of water or the unsuitableness of the soil, it does not flourish, the plant rarely reaching more than a foot and a half in height. There is, however, thriving vegetation everywhere, and after the first

rains the country is said to be "one sheet of green." The fauna are similar to those common in the same latitudes east of the Nile. Copper and iron are said to abound in the hills; but the principal wealth of the inhabitants consists in cattle, which, in the absence of coin, form the chief barter-currency of the country. Besides the traffic carried on with the inland countries of Africa, it maintains a considerable trade with Egypt and the Hedjaz, exporting ivory, ostrich feathers, hides, drugs, copper, and especially *slaves;* against imports of silk, cotton cloths, glass wares, trinkets, sword blades, firearms, and a variety of other goods. The bad distinction of Darfour hitherto has been as the chief *entrepôt* and *point de départ* of the central African slave trade, whence most of this nefarious traffic down the Nile valley and to Arabia, through Souakim and Massowah, has been fed. The total area of Darfour is roughly estimated at about 450,000 square miles, with a population variously reckoned at from 3,000,000 to 5,000,000. A complete survey and census of the country are now being made by order of the Khedive, but none of the results thus far are as yet available for publication.

Wedged in between southern Kordofan and Sennaar, the Shillook country, which was only finally subjected to Egyptian authority in 1870, extends, in a strip of country some 200 miles long by hardly a dozen broad, to the junction east and west of the Sobat and Bahr-el-Ghazal rivers with the White Nile, about 700 miles above Khartoum. Its inhabitants, nominally Mussulmans but in reality Pagans, are perhaps physically the finest, as they are the fiercest, of the Upper Nile tribes. "No known part of Africa," says Dr. Schweinfurth, "scarcely even the narrow valley of the Nile in Egypt, has a density of population so great; but a similar condition

of circumstances, so favourable to the support of a teeming population, is perhaps without parallel in the world. Everything which contributes to the exuberance of life here finds a concentrated field—agriculture, pasturage, fishing, and the chase. Agriculture is rendered easy by the recurrence of the rainy season, by irrigation effected by the rising of the river, assisted by numerous canals, and by an atmosphere ordinarily so clouded as to moderate the radiance of the sun, and to retain throughout the year perpetual moisture."[1] Fashoda, the chief Government station, is already the centre of a considerable trade, in which raw cotton—now largely grown, and for the cultivation of which the soil and climate are admirably adapted—forms a principal staple. A census taken since the annexation of the province returns 3,000 villages, with a population exceeding 1,000,000.

West and south of this, along the Bahr-el-Ghazal, lie the Darfertit and Donga countries, in the former of which the authority of the Khedive is as yet little more than nominal, and even in the latter it is effective only along the river valley to Gondokoro. To this point, however, the Cairo Government claimed to have pushed its sovereignty before 1869, when the Khedive commissioned Sir Samuel Baker to extend his annexations to the Equator, and suppress slave hunting and the slave trade in this great cradle of the traffic. A strong expedition was accordingly dispatched to the region, and during what may be called a campaign of nearly four years, Sir Samuel carried the Egyptian flag to the Albert Nyanza, and scotched, if he did not kill the nefarious commerce at several points. It was probably not his fault that the Khedive thought the result less satisfactory than the cost of it had led him to hope;

[1] *The Heart of Africa*, i., p. 85.

but be this as it may, early in 1874 his Highness induced Colonel Gordon, of Chinese fame, to take up the incomplete adventure on a less grandiose scale; and in the next couple of years, what Baker had begun was, if not perfected, at least extended and consolidated without further costing a piastre to the Cairo Treasury—a judicious management of the Government ivory monopoly, which Baker had established, producing enough to defray the whole expense of the expedition, with a surplus of some 6,000*l.* to spare. The sum of what was thus economically achieved may be briefly stated: Feeling that the first necessity was to strengthen his communications with Egypt, Gordon began by connecting Khartoum and Gondokoro—Baker's Ismaïlia—by a chain, or rather network of new fortified stations, varying from fifty to a hundred miles apart. The first 500 of the 1,400 miles which separate the two points presented little difficulty. The river was clear, the tribes friendly, and the authority of the Khedive was represented by petty officers who maintained at least a semblance of law and order. But at the point where the great river ceases to be a single channel, where the Sobat—680 miles above Khartoum —pours into it from the east, and the Bahr-el-Ghazal (forty miles higher up), with its numerous tributaries from the west, the difficulties of communication begin. Here, accordingly, Gordon planted the first of his posts, naming it Sobat, after the river on which it stands From this point other stations branch out east and west into the heart of the slave-trading districts, one of the most important of these being at Nazar, two days' sail up the Sobat. Some 250 miles up the main stream, but six days' march from it westwards, is another called Ratichambé, in the centre of a chief feeding ground for the traffic; ninety miles further is Bor, and south-west of

that again, far inland, Makraka, on the borders of the Niam-Niam country, which formed the limit of Schweinfurth's travels. Back again on the main stream, ninety miles above Bor, is the great station of Lardo, in favour of which Gordon has abandoned Gondokoro, ten miles higher up; and twelve miles still further south, Ragaff, beyond which the river becomes unnavigable, through a long series of rapids extending to Duffli—Baker's Ibrahmieh—a short distance south of which lie his two final stations of Fatiko and Fowera, almost within hail of the Albert Nyanza. Above Gondokoro the river had at several points been blocked up with great swampy masses of reeds and grass, which stretched from bank to bank, and completely dammed the upper current. These Gordon cut through, and so cleared a continuous waterway to Ragaff, between which and Khartoum a line of steamers now plies. Here a small 10-horse power boat was taken to pieces, and carried round to Duffli, where it was again put together, and the voyage thence to the lake completed—a practicable line of communication being thus opened between Cairo and the Equator, over a distance of 2,800 miles. The Albert is connected with the larger Lake Victoria by the Somerset river, but, though this is short, it is filled up with alternate swamps and rapids, which present insurmountable obstacles to navigation. A road overland must therefore be opened through the territory of king M'tesa, of Uganda, or by an alternative route through the country of the Usoga, a rival tribe. Much of the territory thus added to the dominion of the Khedive possesses splendid agricultural resources, but these cannot be developed or utilised till some better outlet has been found than the long and difficult route by the Nile. Such an outlet is, however, offered by either the Omoo-Maro or Ozy rivers, in the so-called

territory of Zanzibar, the latter of which is navigable from the Indian Ocean up to within 250 miles of Lake Victoria. It is obviously in the interests of civilisation that the Khedive should be allowed a right of way by one or other of these rivers.

In the meantime Colonel Gordon, during this first expedition, completely subjected to a rude but regular form of government nearly the whole country between Gondokoro and the smaller lake, did much to suppress slave-hunting within the same area, enforced recognition of Egyptian authority, and opened up a channel for trade with Khartoum and the Lower Nile.

Justly gratified with these results, the Khedive, in February last, renewed and enlarged Gordon's commission, conferring on him the rank of Pasha, with absolute military and civil jurisdiction over the vast expanse of territory extending southwards from Wady-Halfa to the Equator, and east and west from Darfour to the whole littoral of the Red Sea below Souakim. The main object of these extended powers was, no doubt, to give full scope to the great administrative ability of the new governor-general, whose previous authority only began at Gondokoro, while the Soudan proper—which was ruled or mis-ruled by native officials—lay north of that point. But, almost co-ordinately with this, in the new Pasha's firman were unlimited powers to suppress slave-hunting and abolish the slave trade throughout the whole extent of his government: so absolute, indeed, were these that, in a letter[1] published immediately after his appointment, Gordon Pasha himself declared that if the traffic be not now stamped out, the fault will be his alone. The statement, however, rhetorically exaggerated the extent of his or any human power to accomplish this

[1] Quoted in a foot-note to p. 329.

result, for slavery has flourished in these regions since the Flood, and is almost a natural law, ineradicable by anything but the gradual operation of influences to which even physical phenomena in time yield. If it were confined to a single province, the strong hand of authority might perhaps crush it; but, ingrained as it is into every fibre of what may be called social life throughout all Central and Eastern Africa, no power on earth can extinguish it except by the slow agency of civilisation. That Gordon Pasha will do much towards minimising its attendant evils within the area of his effective authority is not to be doubted, but the bare statement of its widespread sources and of the many channels through which the traffic north and eastwards is fed, will show how idle is the hope that he can suppress it altogether. Thus, large supplies are furnished by the Galla country—outside the Egyptian frontier—which find their way to the coast at Zeyla, and through Abyssinia to Gallabat and Massowah, or to the smaller unguarded towns along the coast, whence they are shipped to Djeddah and Yemen. According to the reports of the collectors of Customs at Gallabat (the frontier Abyssinian town), King John levies black-mail on nearly 20,000 a year passed over his border at that point. The country east of the Sobat river similarly furnishes a large contingent, which goes *viâ* Fazoglou and Sennaar to the great mart at Musselemia, above Khartoum, from which they are either smuggled down past that town by boat, or sent in caravans across the desert to Ambukol, and thence to Nubia and the lower valley. Sennaar itself also exports a smaller number, mainly through the same outlets. "Christian" Abyssinia, with the full knowledge and concurrence of Melek Johannes, contributes several thousand a year, mostly for the Djeddah

market, but a few also for the Lower Nile. Until Baker's expedition, the upper districts of the White Nile and the region of the lakes drove a lively trade, but Sir Samuel largely closed that source, and about 1,000 of both sexes now annually find their way north. He was, however, less successful in the upper districts, along the Bahr-el-Ghazal, which still export large numbers, mostly across the Homr desert into Kordofan, as do also the neighbouring Nooba mountains, whose produce commands a high price in the northern markets. But much larger is the supply from Kordofan itself, which rivals Darfour as the main source of supply in all these regions. This latter province not only exports largely from its own population, but is the great *entrepôt* for the 15,000 or 20,000 slaves a year furnished by the Kredy tribes of the Darfertit country, and the remoter Niam-Niams, who all find their way into the various currents of the trade east or north.

A glance at the map will show how wide is the geographical area which thus feeds the trade—much of it far outside even the nominal limits of Egyptian sovereignty, and which can therefore be in no way controlled by Gordon Pasha; while as regards the remainder, his authority over three-fourths of it is only effective in the towns and at the scattered military posts. In these he may scotch the traffic, if fairly helped by the native officials on whom the execution of his orders must depend. The river may, and no doubt will, be closed against the passage of slave *noggurs* and Massowah and Souakim against exports; but it will still be impossible to close the desert routes, or to blockade the whole Red Sea coast from Zeyla to Cosseir. The wildest abolitionist would hardly suggest that the Khedive should maintain a squadron along this great extent of littoral;

and, in default of that, the human contraband will still be "run" from a score of points on the coast, notwithstanding the occasional capture of a *dhow* by a chance British or Egyptian cruiser.

At this early stage of its development, the trade of these remote provinces is, of course, relatively inconsiderable,[1] but the producing capacity of nearly the whole is described by both Baker and Schweinfurth as great. Besides the Shillook country, northern Sennaar, Shendy and Taka are especially adapted by soil, climate, and regular rains from June to the middle of September, for cotton cultivation on the largest scale. Kordofan and the Basé country yield large quantities of gum-arabic, which can be sold at Kassala at twenty pias. (about 4s. 2d.) per cantar of 98 lbs. Ostrich-feathers, ivory, aromatic woods, coffee, skins, ebony, senna, potash, and bees'-wax—this last mostly from Abyssinia—are also collected by travelling native traders, and resold to resident merchants in Khartoum and Kassala, at prices that leave a large margin of profit on export. With the gradual establishment of more regular government, the opening of easier and more rapid means of communication, and the even partial suppression of slave-hunting, a wide and speedy growth in the producing industries may be expected—with corresponding gain to the populations, to the Egyptian Treasury, and to civilisation. The wise policy which has been pursued by the Government for some years past, of supplying cotton and other seeds gratuitously, and offering every inducement to raise experimental

[1] The total value, nevertheless, of the annual produce of the Soudan that reaches Cairo alone averages 1,500,000*l.*; besides which, considerable quantities of other goods are exported through Souakim and Massowah to the Hedjaz.

crops, has prepared the way for this; and only access to profitable markets is now needed to stimulate the production of grain, sugar, and cotton, on a scale fully commensurate with that of Egypt itself.

The great centres of collection for the existing trade are Khartoum, Kordofan, and Darfour. Goods are chiefly brought to the first of these by land, and are there placed in river-boats, or *noggurs*, rudely-built craft of about 40 tons burthen, which take cargo down as far as Aboo Hammed, at the north-eastern curve of the Great Bend, where it is transferred to camels, and carried across the Nubian desert to Korosko. There it is again re-shipped, and conveyed by water to the First Cataract, which is easily passed at high Nile, or, when the river is low, the goods are landed at Shellal, a village below Philæ, thence conveyed on camels to Assouan, and again re-laden into boats and floated down either to the railway at Assiout, or, without breaking bulk, to Cairo. By this route, five changes, involving nearly 250 miles of land carriage, are necessary between Khartoum and the capital. From the Kordofan and Darfour districts goods are brought by camels across the desert, and embarked on the Nile at Dabbe and Handek, whence they are conveyed by boat to Hafir, at the head of the Third Cataract, and thence again by camels to Wady-Halfa, and so down, like the Khartoum freights, to Cairo; or at high Nile they may be taken by river as far as Amka, at the head of the Second Cataract, but this last portion of the voyage is tedious and full of risk. These routes also involve five changes, and respectively about 590 and 400 miles of land carriage between Kordofan and Cairo. The central Darfour districts are nearly 200 miles still further away from the river. It need hardly be said that the difficulties of transport thus

offered very heavily handicap trade, and show how valuable will be the facilities afforded by the railways now in progress, which—when the various links are completed—will furnish through communication between Khartoum and Alexandria with only a single break of gauge.

But even already, "the foundations of a great future have been laid: a remote portion of the African race hitherto excluded from the world's history has been brought into direct communication with the superior and more civilised races; legitimate trade has been opened; therefore, accepting commerce as the great agent of civilisation, the work is actually in progress." [1] If this were true five years ago, it is still more so now; and in the sole fact that absolute power to direct this peaceful campaign against barbarism is in the hands of one of the best men and ablest administrators whom even England could furnish for the task, we have the surest pledge that the work will be well and honestly done. In selecting such a man, and entrusting him with such powers, the Khedive, in his turn, has given the best possible proof of his own claim on the confidence of Europe, and of his honest purpose not merely to do all that humanly can be done to rescue these vast regions from the curse of slavery, but to reclaim the whole to peaceful industry, settled government, and civilisation.

Such, reader, are the chief economical conditions of New Egypt. How far this rapid survey of them justifies the friendly and hopeful estimate of the country and its Government with which these pages

[1] *Ismaïlia*, ii., p. 512.

opened, must be left to your judgment. To this—in no spirit of partisanship, but of confessed sympathy with the revival of the most interesting country in the world—I submit the facts and figures now put together. On the seeming eve of what promises to be another "new departure" in Egyptian history, their publication has at least the apology of being more or less opportune.

APPENDIX A.

The Viceregal Family.

Ismaïl I., Khedive, born December 31, 1830, son of Prince Ibrahim Pasha—eldest son of Mehemet Ali Pasha—succeeded his uncle, Saïd Pasha, on January 18, 1863: the succession made hereditary in the direct line, by firman of May 21, 1866: the title of "Khedive" (sovereign) conferred by firman of June 8, 1867; and complete autonomy conceded, with the right of unlimited augmentation of the army and navy, and of concluding foreign loans and commercial treaties, further ratified by firman of September 29, 1872.

Children.—1. The Princess *Tawfideh*, born in 1850, married in 1868 to Mansour Pasha, son of the late Achmet Pasha, and nephew of Mehemet Ali.

2. Prince *Mehemet Tewfik* Pasha (President of the Council), heir-apparent, born in 1852, married in January, 1873, to Emineh Khanum, daughter of the late Il-Hawi Pasha, by whom he has a son, Abbas Bey, born July 14, 1874.

3. Prince *Hussein-Kiamil* Pasha (Minister of Finance), born in 1852, married in January, 1873, to Aïn-el-Haat, daughter of the late Achmet Pasha, by whom he has a son, Kemal-ed-dyn Bey, born in December, 1874.

4. Prince *Hassan* Pasha (Minister of War), born in 1853, married in January, 1873, to Khadijah Khanum, daughter of the late Mehemet Ali Pasha (who died in 1861), by whom he has a son, Aziz Bey, born in 1873, and a daughter, Azizah Khanum, born in 1875.

5. Princess *Fatma* Khanum, born in 1852, married in 1873 to the late Tossoum Pasha (son of Saïd Pasha), who died last year.

6. Prince *Ibrahim Helmy* Pasha, born in 1860.

7. Prince *Mahmoud* Bey, born in 1863.

8. Prince *Fuad* Bey, born in 1867.

9. Princess *Djemileh*, born in 1869.

10. Princess *Emineh*, born in 1874.

11. Prince *Djemal-ed-dyn* Bey, born in 1875.

APPENDIX B.

Egyptian Currency, Weights, and Measures.

In Egypt, as in Turkey, the monetary unit is the piastre (Arab. *kirsh*) of 40 paras (Arab. *faddah*), which is coined in gold pieces of 100, 50, 25, 20, 10, and 5 pias. each; and in silver of 20, 10, 5, 2½, and 1 pias. each; and in copper of 1 pias., 20, 10, and 5 paras. The 100 pias. gold piece, or as it is locally called the Egyptian "guinea," weighs 44, as against 41 "kerats," the weight of the English sovereign. The current value of the gold and silver coins is of course fixed, but that of the copper money fluctuates, and is greatly depreciated below its nominal standard. Thus, while an English sovereign is worth only 97½ pias. in Egyptian gold or silver "tariff" piastres, its average value for some months past has been about 450 pias. in copper. The "tariff" piastre is therefore equivalent to nearly 2½d. English.

There are three rates of exchange—(1) The Government rate of 97½ to the pound sterling; (2) the commercial rate of 195 pias. to the pound sterling, which reckons the silver piastre as two, and excludes copper; and (3) the copper rate, which fluctuates as stated, and is generally used only in the smallest retail transactions. As, however, this native currency is insufficient for the large commerce of the country, the coins of nearly all the European nations pass as legal tender, both with the Government and between merchants, at the following tariff rate:—

	Pias.	Par.
Gold.		
Geeneh Ingleêzi, English Sovereign	97	20
Geeneh Stambooli, Turkish lira	87	30
Geeneh Moskôbi, Russian guinea	79	18
Binto, French Napoleon	77	6
Bendoöqe, Venetian sequin	46	17
Májar, Austrian sequin	45	26
Dabloôn, doublon	313	30
Silver.		
Robîeh, rupee	9	5
Shileên, shilling	4	35
Riâl Stambooli, Turkish dollar	16	35

SILVER—*Continued.*	Pias.	Par.
Riäl Shînkoo, 5 franc piece	19	10
Aboo mádfaa, Spanish dollar	20	28
Aboo tēîra, Austrian dollar	20	—
Riäl Moskōbi, Russian dollar	14	27

A "purse" (Arab. *kees*) consists of 500 tariff piastres, and is worth therefore about £5 2s. 6d. A *khasneh* (treasury) is worth 1,000 purses.

As regards Weights and Measures, a Khedivial decree of August 1, 1875, ordered the adoption of the metrical system from and after January 1, 1876; at first, in all official and administrative transactions, and gradually afterwards in general substitution for the old standards. But the reform has as yet made little headway, and the following may, therefore, be given as the *Weights* still in general use:

12 *dirhem* make	1 *wegîeh* (or ounce).
12 *wegîeh* „	1 *rottl* (or pound).
2¾ *rottl* „	1 *wukkah* (or oke).
36 *wukkah* „	1 *cantar*.

The English equivalents of these in avoirdupois weight are:—

1 oz. $\frac{1}{2}\frac{9}{5}$ drachms make	1 *dirhem*.
15 ozs. 13 dwts. $\frac{11}{13}$ drs.	1 *rottl*.
2¾ lbs. make	1 *wukkah*.
99 lbs. „	1 *cantar*.

An Alexandria steam-pressed bale of cotton averages about 620 lbs.

The *Measures* used differ according to the articles concerned. Thus in cloth measure at Alexandria

1 *derâa*, or *pic*, equals ... ... 23⅝ English inches;

but in inland trade at Cairo and elsewhere the following are the equivalents in measuring linen and other textile goods made in the country:—

1 *derâa beledi* equals ... ... 53¾ inches.

And in measuring European cloths

1 *derâa stambooli* equals ... ... 26½ inches.

While for East Indian goods

1 *derâa hindazeh* equals ... ... 25 inches.

In land or superficial measure

300 *kassabah* make	...	...	...	1 *kerat.*
24 *kerat* „	...	...	...	1 *feddan.*[1]

In dry measure

12 *kileh,* or 24 *roobaa,* make	...	...		1 *weibeh.*
6 *weibeh*	...	...	...	1 *ardeb.*

The ardeb, however, differs according to the class of produce it is used for. Thus in measuring grain it is equivalent to 133·6374 kilograms (or, roundly, about 5 English bushels), while in measuring lentils and peas it represents 151·45572 kilog., and for Rosetta rice 185·6085 kilog.

APPENDIX C.

Egyptian Calendars.

No fewer than five calendars are partially followed in Egypt:—(1) the Mohammedan; (2) the Coptic; (3) the Julian, or Greek; (4) the Jewish; and (5) the Gregorian. According to the first of these, —which dates from the Hegira, A.D. 622—the year consists of twelve lunar months of alternately twenty-nine and thirty days, or in all of 354 days. In order, however, to harmonise civil with solar time, during every cycle of thirty years one day is intercalated eleven times —namely, at the end of each last month of the 2nd, 5th, 7th, 10th, 13th, 16th, 18th, 21st, 24th, 26th, and 29th year of the cycle. Thus the year of the Hegira 1294 began on January 16, 1877. In Egypt, however, this era is now used almost exclusively for religious purposes, and by Moslems in their private social relations with each other. The Coptic calendar dates from the era of Diocletian, or "the Martyrs," A.D. 284, and its year consists of twelve months of thirty days each, with five days added at the end of every ordinary year, and six days at the end of every Leap-year. The Coptic year 1592 began on September 11, 1876, and will end on the 10th of September next. Until the official adoption of the Gregorian calendar last year, this Coptic era was followed in all the Government offices, and is still

[1] The feddan, which as previously stated is nearly equal to an English acre, formerly consisted of 333 kassabah.

generally used in all native time calculations in business matters throughout the country. The Julian or Greek year is the "old style,' which is twelve days behind the Gregorian or "new style," that has now superseded it everywhere in Europe, except in Russia and Greece. By a decree of the Khedive, this latter was officially adopted by the Egyptian Government from January 1, 1876, and the public accounts are now all kept under the new date. The Jewish era, dating from the (supposed) Creation, reckoned at B.C., 3760, is used only by the Jews themselves. Their "Year of the World," 5637, began 8th September, 1876.

APPENDIX D.

MILITARY GRADES AND RATES OF PAY.

THE following are the various grades in the Egyptian army, with their European equivalents, and the scale of monthly pay in Egyptian pounds and piastres :—

Arab rank.	European equivalent.	Pay, E£	Pias.
Nafar	Private soldier	0	20
Onbashi	Corporal	0	30
Chaoush	Sergeant	0	40
Boulouk-amen ...	Quartermaster	0	50
Bash-chaoush ...	Sergeant-major	0	60
Saûl	Adjutant	1	20
Spiran	Ensign	2	20
Milazim-sani ...	Sub-lieutenant	3	0
Milazim-aoul ...	Lieutenant	3	50
Yûsbashi	Captain	5	0
Sagh-kaul-agazi ...	Adjutant-major	12	0
Bimbashi ...	Major	20	0
Kaimakam ...	Lieut.-Colonel	30	0
Amir-ali	Colonel	40	0
Amir-liva ...	Major-General	60	0
Ferik	General	75	0

In addition to these rates of pay, each rank, from that of private soldier to adjutant-major, receives rations and clothing according to the grade.

APPENDIX E.

Cost of Living in Egypt.

In Egypt, as throughout most parts of the East, the cost of living has considerably increased within the past twenty years, but except for the luxuries which foreigners generally regard as necessaries, it is on the whole still much below the average of Europe. Rents of houses occupied by foreigners in the larger towns are excessive, and most European goods are also of course dearer than in the producing markets; but these excepted, provisions, wages of native servants, and the other general incidents of domestic outlay, are, with some few exceptions, much below the European standard. The subjoined may be accepted as the average prices of the articles mentioned in Alexandria and Cairo, where most of the foreign population resides:

	Current Piastres. 195 = £1.	English Money.
		s. *d.*
Beef ... ... per lb.	7 28	0 9½
Mutton... ... ... „	6 36	0 8½
Turkeys (best) ... ... each	97 20	10 0
Chickens ... ... „	8 38	0 11
Fish ... ... per lb.	9 30	1 0
Eggs ... ... per doz.	5 27	0 7
Frank Bread ... ... per quartern loaf	9 30	1 0
Butter (Cork) ... ... per lb.	14 25	1 6
Egyptian Butter (good for cooking) ... ... „	12 7	1 3
Milk ... ... per pint	4 35	0 4
Tea ... ... per lb.	39 0	4 0
Coffee ... ... „	8 38	0 11
Cheese ... ... „	12 7	1 3
Potatoes ... ... „	1 8	0 1½
Cabbage ... ... each	1 24	0 2
Cauliflower ... ... „	2 17	0 3
Peas ... ... per lb.	2 32	0 3½
Beans ... ... „	1 25	0 2
French Beans ... ... „	2 0	0 2½
Turnips... ... ... „	1 8	0 1½
Rice ... ... „	2 17	0 3
Lettuce... ... ... each	0 24	0 0¾
Tomatoes ... ... per lb.	1 8	0 1½

		Current Piastres. 195 = £1.	English Money.
			s. *d.*
Bamias	per lb.	2 17	0 3
Badangan (egg plant) ...	,,	2 9	0 2¾
Vegetable Marrow	,,	2 17	0 3
Yams	,,	1 8	0 1½
Apples	,,	2 32	0 3½
Pears	,,	3 0	0 3¾
Figs	,,	0 32	0 1
Apricots	,,	4 0	0 5
Pomegranates	,,	1 24	0 2
Grapes	,,	1 24	0 2
Melons (water)	each	6 0	0 7
Bananas	per lb.	6 16	0 7½

APPENDIX F.

EGYPTIAN TRADE WITH GREAT BRITAIN.

As nearly 70 per cent. of the whole trade of Egypt is with Great Britain, it may be worth while to record the following annual totals of the exports and imports to and from the United Kingdom during each of the ten years ending 1875. The table includes the value of goods in transit, and so, independently of its other fluctuations, reflects the decline in that traffic :—

Year.	Exports to U. K.	Imports from U. K.
	£	£
1866	15,368,324	7,556,185
1867	14,498,292	8,198,111
1868	17,584,616	6,056,404
1869	16,796,233	
1870	14,116,820	8,726,602
1871	16,387,424	7,038,795
1872	16,455,731	7,213,063
1873	14,155,913	6,220,013
1874	10,514,798	3,585,106
1875	10,895,043	2,945,846

The "Statistical Tableau" of freights and other commercial incidents for 1876, compiled by Messrs. R. J. Moss & Co., of

Alexandria, supplies the following partial note of the trade with the United Kingdom for that year:—

Exports.—Cotton, 332,460 bales; cotton-seed, 1,294,659 ardebs (about 153,000 tons); wheat, 867,838 ardebs (about 546,700 qrs.); maize, 33,472 ardebs (about 21,000 qrs.); barley, 151,296 ardebs (about 90,800 qrs.); beans, 983,098 ardebs (about 639,000 qrs.). The Alexandria imports of coal and coke for the year amounted only to 285,022 tons.

APPENDIX G.

Mr. Cave's Report on the Financial Condition of Egypt.

Subjoined is the valuable report by Mr. Cave, embodying the result of his mission last year to investigate the state of the Egyptian finances. Several of his statistics, it will be seen, differ from those in the text of this volume, but the discrepancy is explained partly by the interval which has elapsed since the date of his inquiry, and partly by the difference of source from which the information has been derived. Probably from the novelty of the subject and the complexity of its details, Mr. Cave has, in a few instances, fallen into mistakes, which, however, detract little or nothing from the general value of his report:—

"The critical state of the finances of Egypt is due to the combination of two opposite causes.

"Egypt may be said to be in a transition state, and she suffers from the defects of the system out of which she is passing, as well as from those of the system into which she is attempting to enter. She suffers from the ignorance, dishonesty, waste, and extravagance of the East, such as have brought her Suzerain to the verge of ruin, and at the same time from the vast expense caused by hasty and inconsiderate endeavours to adopt the civilisation of the West.

"Immense sums are expended on unproductive works after the manner of the East, and on productive works carried out in the wrong way, or too soon. This last is a fault which Egypt shares with other new countries (for she may be considered a new country in this respect), a fault which has seriously embarrassed both the United States and Canada; but probably nothing in Egypt has ever approached the profligate expenditure which characterised the commencement of the Railway system in England.

"The Khedive has evidently attempted to carry out with a limited

revenue, in the course of a few years, works which ought to be spread over a far longer period, and which would tax the resources of much richer exchequers.

"We were informed that one of the causes which operate most against the honesty and efficiency of native officers is the precarious tenure of office. From the Pashas downwards every office is a tenancy at will, and experience shows that while dishonesty goes wholly or partially unpunished, independence of thought and action, resolution to do one's duty and to resist the peculation and neglect which pervade every department, give rise to intrigues which, sooner or later, bring about the downfall of honest officials; consequently those who begin with a desire to do their duty give way before the obstructiveness which paralyses every effort.

"The public servant in Egypt, like the Roman Proconsul, too often tries to make as much as he can out of his office while it lasts, and the scandal takes place, of the retirement in a few years with a large fortune of men whose salary is perhaps 40*l.* a month, and who have plundered the Treasury on the one hand, and the peasant on the other.

"The European employés of the Khedive take care, naturally, that their position should be defined and secured. This gives them freedom of thought, speech, and action, which has been in many cases most valuable to Egypt. Mr. Acton, sent out from the English Board of Trade, is a most useful member of this class. If men of such character and position were appointed to higher offices in the Civil Service, they would, as we believe, bring about most excellent results. They would be checks upon the adventurers who have preyed upon Egypt; and they would take care that the adviser upon public works should be in every case distinct from the person who benefits by their construction. The actual terms of the contracts require the scrutiny of men of integrity and capacity. It is admitted by contractors themselves that they charge far more than the fair amount for their work because the conditions of the contracts are so unnecessarily and absurdly onerous that they are compelled to make extra charges to protect themselves against possible loss; so that, one way or another, Egypt is the loser. An official of high rank said to us that the great want in Egypt is a body of high-class Europeans, not those who compete with each other to make money, and put pressure upon the Khedive, but men like our Indian officials, who have done so much to raise the tone of the native races.

"The principal source of the revenue and of the wealth of Egypt is the land. Agriculture here is almost independent of seasons, but it is dependent upon widely extended, laborious, and costly systems of irrigation. Where these are wanting, the land quickly relapses into desert. Where these are supplied, as in Upper Egypt by the Bahr Yussuf and the Bahr Ibrahim, and more to the east by the Sweet-water Canal to Ismaïlia and Suez, whole tracts of land are brought into cultivation. It is necessary, therefore, that irrigation should be carried on completely and economically.

that drainage should accompany it for the purpose of washing the salt out of the subsoil, and that the distribution of water should be carried on justly and regularly. On all these points much improvement is needed. Still the productive power of the land has immensely increased during the administration of the present Ruler, as will be more particularly described hereafter.

"The tenure of land varies. All land theoretically belongs to the State, as in feudal times in Europe, and similarly large estates were parcelled among the conquering races, and charged only with a fixed quit-rent called the dîme or ouchour. The remainder of the land is held from the State by communities or individuals on payment of a tax called karadj, which is really a rent, and which was variable, and might at any time be augmented at the will of the Government. This land could not originally be leased, alienated, or devised, but relapsed to the State at each termination of ownership. More liberal and humane laws have been enacted by the present Ruler, and the land passes as easily as copyhold in England. Where land belongs to communities, the Sheykh distributes it to families for a year only, which is a great obstacle to industry. Nubar Pasha informed us that he let some land for rent in the ordinary way. Some he worked with labourers for hire; some in a sort of partnership with the labourers, who paid him a certain portion of the produce, he finding seed, implements, &c.

"Labourers for hire are difficult to be obtained in many places. Almost every man has a small parcel of land to cultivate; consequently contractors agree to take a piece of work for so much, and to bring a certain number of hands from various places. They make their terms with the landowner, who knows no one but the contractor, and it often occurs that the latter, though well and punctually paid, starves and defrauds the labourers in his gang, and great misery and oppression take place, whether the gangs so brought together are of a better sort, who feed themselves and earn, say, 5 piastres a day, most irregularly paid, or whether they are the poorest Fellaheen, obtained by help of the Mudir or Head-man of a district, who are paid nothing, but work from sunrise to sunset for their bare food, and run away at every opportunity. This uncertainty, whether as to labour and taxes by the proprietary or as to pay and position by the peasantry, lowers the value of land to such a degree that we were informed that good land in the Delta might be bought for five years' purchase. Some time ago the Khedive established a 'Crédit Foncier,' or land bank, for the purpose of lending money to the peasantry at moderate rates, and lost a large sum of money by it. His motives were doubtless good, but he evidently began at the wrong end, and tried to palliate the evils of a system he ought to have reformed. There have been projects lately on foot for the introduction of Chinese into Egypt, and proposals have been made to the Khedive to send people to China to organise a system of emigration, but he objects that the introduction

of Chinese will be very expensive, and that there will be much trouble in enforcing their contracts. If they come of their own accord, he will be glad to employ them and to settle them on unoccupied land. We were informed that all the labourers employed in the sugar-factories were paid regular money wages, and that the soldiers who are settled in military colonies or encamped near the sugar estates are paid about 1s. a day, or by the task, besides their military pay; and as they work under their officers, it is said that twenty-five do as much work as sixty ordinary labourers. Besides these there are undoubtedly *corvées* and people working out the land tax paid for them by the Khedive.

"The Daira Sanieh, or private estate of the Khedive, consists of some 350,000 feddans[1] of good land, chiefly in Upper Egypt, besides 100,000 feddans of poor land not under cultivation. Of the former he lets about half and keeps about half in hand. The net revenue of the whole is estimated at 422,000*l.* in round figures. About 15,000 acres of what the Khedive keeps in hand are planted in cotton, and 120,000 in what is called winter cultivation, *i.e.*, corn and vegetables of various kinds. But the most important industry is the cultivation of the sugar-cane and the manufacture of sugar—40,000 acres are planted with canes, and there are twelve large factories with most elaborate machinery at work.

"The fault here, as in so many other instances, has been that this industry has been established without due consideration. Very large factories were built before the land was ready to supply them. They have not been placed in the middle of the estates, but near the main railway; consequently the canes have to be brought many miles by locomotives to the factories, involving a large consumption of coal, and making supervision more difficult. Some factories, full of costly machinery, have been abandoned, others left unfinished with the machinery already on the spot; steam machinery for irrigation has been erected and never used.

"The manufacturing accounts can be accurately kept. Those for cultivation are complicated by *corvées* and military labour, and labour in payment of debts. We have heard the cost of cultivation, including the cutting of the canes, estimated at 5*l.* per acre. The sugar-estates, we feel convinced, bring in a return beyond their working expenses, and this will increase year by year, as the cultivation improves, as more land is brought under canes, and the full power of the machinery brought into play. Much economy has already been effected by the utilisation of the refuse of the factories for manure, and by the better management of the megass, or cane-stalks, which now almost wholly replace coal, both in driving the machinery and evaporating the sugar. It would therefore be unadvisable that these estates should be given up. But the original faults can hardly be remedied, and it seems impossible that there should ever be an adequate

[1] The feddan nearly corresponds to the English acre.

return for the capital, especially as so much was provided by loans at a high rate of interest.

"It is therefore with great apprehension that we hear of the capital account of the Daira being still open, and of vast schemes of irrigation costing millions being under consideration.

"We were informed before leaving England that Egyptian sugar had been sold in London for less than cost price. This might have been owing to a faulty system by which merchants were favoured at the expense of the grower, or pressing debts discharged in sugar at prices below the market value, or to buyers who had combined to make a monopoly, having been obliged to realise at a loss. A deceptive mode of sampling had also given a bad name to Egyptian produce. A very much better system now prevails and will soon produce good effects. The sampling is honestly and carefully performed; the sugar is sold at public sales, and a genuine competition is commencing, so that Egyptian sugar, which is of excellent quality, may be expected to give better returns. A fact has been mentioned to us by a high authority here, in confirmation of his opinion that sugar does not pay and ought to be given up, namely, that French refined sugar in Alexandria competes with native sugar, notwithstanding an 8 per cent. duty. But this has been explained by practical people in two ways. First, there is no refined, *i.e.*, loaf sugar, sent to Alexandria for sale as a regular system (not more than 2,000 tons are made at present altogether, namely, at Minieh); the highest of the three qualities made for the market is white crystallised sugar. Secondly, the bounty in form of drawback given by the French Government enables French sugar in Egypt, as in England, to compete unfairly with other sugar, though with regard to Egypt there is this excuse—that Egyptian sugar is protected by a Customs duty unbalanced by an excise on native produce.

"It has been said that the public accounts, as well as those of the Daira Sanieh, have been made with a view to deceive. It seems possible that an intricate statement may be preferred for the purpose of retaining power in the hands of the Finance Minister, in whose office no European is at present employed, or even allowed to enter. But we can hardly imagine that a designedly fictitious statement would be published year after year, and yet that it should be proposed that an inspection of accounts should take place by an experienced financier to remain here for at least five years, with access to all the records.

"That the accounts are kept in a slovenly imperfect manner is evident on the face of them. Take, for instance, the Budget for 1876, and the 'Compte Rendu' for 1875, which contain items jumbled together in a most extraordinary way, such as a railway in Soudan and a canal in Egypt in one sum. If we examine the accounts of the Customs, which are under the Finance Minister, we shall find no complete official table of the imports and exports of each Custom House in Egypt, specifying

the kind, the quantity, the value, the place from whence they come, or their destination. Moreover, the returns of quantity are made on no principle whatever, being sometimes according to weight, sometimes according to number, size of parcel, so many pairs, &c., and the periods are sometimes according to the Coptic, sometimes according to the Gregorian calendar, which, it is scarcely necessary to say, do not correspond.

"According to a calculation made from the imperfect data accessible to the public, it has been estimated by a high independent authority, that the receipts from the Custom House of Alexandria alone for the year 1872 ought to have amounted to £558,727, whereas the return of receipts from all the ports reached only £531,215, or £17,510 less than it ought to have been from Alexandria alone.

"Again, the receipts and expenses of railways for the year 1874-75 (1591 Coptic) give the receipts at the different stations with great minuteness, even to an entry of four piastres. But the salaries and wages, amounting to £195,227, are comprised in one sum, with no particulars of the payments to any particular class, nor even of the number of officials or servants employed; the same may be said of a single entry of £137,000 for repairs of engines and carriages. It is therefore easily to be understood that the receipts of the railways are generally supposed to be one-fifth lower than they ought to be under efficient management.

"It may be mentioned here that all construction of new railways, except that of the Soudan, is suspended, and that this, which is called Nubar's line, is confined to the portion of the Nile between Wady Halfa and Hannek, about 200 miles; to cost, fully equipped, with machinery already on the spot, 7,000*l.* per mile. The remainder of Fowler's original line, 350 miles from Hannek to Shendy, across a very difficult country, has been given up. The cataracts on this upper part of the Nile can be navigated during nine months in the year; but those on the line which is in course of construction are almost always impassable.

"The Soudan is, we are informed, a rich, populous country, growing much corn. After paying the expenses of Darfour and the expedition to the great lakes, it contributes to the Treasury, according to the public accounts, a net revenue of 150,000*l.*

"The occupation of Darfour and the expedition to the equatorial lakes are not, commercially speaking, successful. The Khedive has engaged to some extent in these enterprises for the sake of the suppression of the Slave Trade, and the Abyssinian war was almost forced upon him. It is probable that he will retire as soon as possible from Abyssinia and the Equator. Extension of territory and of trade may have attractions for the Khedive, but he is not dazzled by the barren glory of war.

"According to the documents handed to us by the Khedive, and to information furnished verbally by his Highness, and tested by such means

as were in our power, the present position of the Egyptian finances is as follows:—

"The revenue of Egypt has increased from £55,000 a year in 1804, £3,300,000 in 1830, and 4,937,405 in 1864, the second year of the Khedive's administration to £7,377,912 in 1871, the year previous to the changes caused by the law of Moukabala. Under this law all landowners could redeem one half of the land tax to which they were liable by the payment of six years' tax, either in advance in one sum or in instalments. Those who paid down this contribution in one sum received an immediate reduction of their tax; those who elected to make the payment in instalments receive a discount of 8⅓ per cent. on their advance, and the reduction only takes place on the completion of their contribution.

"The extreme term for the entire redemption of each contributor's tax was at first fixed for six years; but as the law was either not properly understood, or the small owners were unable to make so heavy a payment annually, as their land tax, plus its amount minus 8⅓ per cent., the term was extended from six to twelve years, two years after the first promulgation of the law, so that it now has ten more years to run, during which the contributing landowner has to pay land tax plus one half the tax ($\frac{6}{12}$), and minus 8⅓ per cent. of the same.

"The annexed Table shows the operation of the system since its institution, and the amount of income to be derived from it during the next ten years, to the end of 1885.

"It is most advantageous to the landowner who can afford the present sacrifice, as in addition to the advantage of securing in perpetuity the redemption of half his tax by a payment of five and a half times its present amount, to which it is reduced by the discount allowed $\left(\frac{8\frac{1}{3}}{100} \cdot \frac{1}{2} \times 12 = \frac{1}{2}\right)$, he secures an indefeasible title to his land, the tenure of which is at present of an uncertain character.

"To the State the arrangement is a ruinous one from a fiscal point of view, as the Khedive has bound himself in the most solemn manner not to re-impose the redeemed moiety of the tax in any shape whatever, and he has thus sacrificed for all time fifty per cent. of revenue from this source in order to realise eleven times the annual amount remitted during a period of twelve years. The original intention of the law was to realise at once, or in a few years, sufficient capital to pay off the floating debt, but by extending its operation the sum raised annually has only sufficed to pay the interest on it.

"The revenue now produces annually £10,689,070, but of this amount the Moukabala, £1,531,118 is terminable, and will drop out of the account in ten years—*i.e.*, in 1886, whilst at the same time the land tax will fall from £4,305,131 to £2,634,824.

"The normal expenditure amounts to £9,080,681, of which £5,036,675 is devoted to paying interest and sinking funds of the various State loans, of which an account will presently be given.

"The private loans of the Khedive are not chargeable to the State, except in two instances, namely, the Mustapha Pasha Loan of 1867, and the Anglo-Egyptian Daira Loan of 1865. These loans, and a portion of the Daira floating debt, amounting to 3,000,000*l.*, have been taken over by the State for value received.

"The revenue has certain elements of elasticity in it; but these are not likely to be very active in operation.

"The principal of these is the Land Tax, which, after its reduction under the operation of the Moukabala Law, will probably grow with the increasing area of cultivation, an increase likely to receive an impulse from the reduction of the tax. At present 4,805,107 feddans pay tax as under cultivation, which, compared with the 4,051,976 feddans cultivated in Saïd Pasha's time, show an increase of 18½ per cent. during the present Government. 352,350 feddans have also been brought under cultivation, and will shortly be assessed for taxation. As this will be effected gradually, no immediate increase of revenue will take place, but an addition of 180,000*l.* a year from this source may be expected in the course of the next five years.

"A further area of 267,650 feddans will become liable to taxation after it has been surveyed, from which an additional 140,000*l.* a year may be expected.

"These two additions to the cultivated area amount to 620,000 feddans, or 15 per cent. of the land under cultivation at the Khedive's accession, making therefore in all an addition of 33½ per cent. during his rule of thirteen years.

"There are still 1,093,000 feddans of cultivable ground, which have been registered but not yet cultivated.

"The net revenues of the railways have increased from 750,000*l.* a year in 1873, to 990,800*l.* in 1875; but this rate of increase cannot be entirely relied upon, as more of the gross receipts will necessarily be required for maintenance and renewal as the permanent way becomes worn, and deficient crops would cause diminished traffic. Still, even after making these allowances, an honest and intelligent administration of the railways would probably produce a larger revenue.

	Miles.
"The extent of railways in 1873 was	1,110
Were added in 1874-5	100
	1,210

"These lines have been constructed at an average cost of about 11,000*l.* per mile. Other lines have been projected, but the only important one actually in the course of formation is that in the Soudan. This is not the original Soudan line, but, as explained above, a section of it only, required to pass the worst cataracts.

"The Customs duties may also be expected to improve. There has been

a steady and gradual increase of the exports of cotton, which have risen from 1,253,593 quintals in 1867 to 2,615,120 quintals in 1874.

"In the thirteen years of Ismaïl Pasha's rule, the quantity of cotton exported has been 3·6 times that of the exportation of the preceding thirteen years, or an increase of 257 per cent. The fall in price has caused disappointment, and may check production, it being now doubted whether corn does not pay better. At the same time improved machinery enables cotton to be more effectually separated from the seed, from which oil and cake are now largely made.

"In the general returns of exports and imports there is also a marked improvement.

"The total value of imports from 1863 to 1875 amounts to 61,939,736*l.*, against, from 1850 to 1862, 29,641,155*l.*, showing an advance of 100 per cent. in thirteen years.

"Exports have quadrupled during the same period, having increased in value from 36,339,543*l.* to 145,939,736*l.*

"During the thirteen years the growth of the population of Egypt has been considerable, the births having exceeded the deaths by 636,809.

"Education has been carefully attended to, the number of schools established on a European model having increased from 185 in 1862 to 4,817[1] in 1875. In the latter year there were 4,817 schools, with 6,048 masters and 140,977 pupils, being an augmentation on the previous year of 1,072 schools, 1,615 masters, and 27,722 pupils. The quality of the education given necessarily varies, but it has on the whole decidedly improved, and is in some cases of a very superior character.

"These statistics show that the country has made great progress in every way under its present ruler; but, notwithstanding that progress, its present financial position is, for the reasons that have been already stated, very critical. Still the expenditure, though heavy, would not of itself have produced the present crisis, which may be attributed almost entirely to the ruinous conditions of loans raised for pressing requirements, due in some cases to causes over which the Khedive had little control.

"The loans have been raised as follows:—

"In 1862 Saïd Pasha contracted the first loan. The nominal amount was 3,292,800*l.*, repayable in thirty years; the interest 7 per cent., and the sinking fund 1 per cent. We have no particulars of the amount really received on this loan.

"In 1864 the first of the present Viceroy's loans was contracted. The nominal amount was 5,704,200*l.*, of which, however, only 4,864,063*l.* was received. The interest and sinking fund on the nominal amount were respectively 7 and 3·87 per cent., but on the amount received they

[1] This is an error. The total number of schools in the country in 1875 was 4,817; but of these 4,685 were Arab primary schools, by no means "on a European model."

were 8·2 and 4·5, or, together, 12·7 per cent., instead of 10·87 per cent. on the nominal value. This loan was redeemable in fifteen years, and will, therefore, be paid off in 1879.

"The Loan of 1868 was not made redeemable till 1898; its nominal amount was for 11,890,000*l.*, of which only 7,193,334*l.* was received. The apparent interest and sinking fund of 7 and 1 per cent. became therefore 11·56 and 1·68 per cent., or together, 13¼ per cent.

"In 1873 a further loan was contracted for a nominal amount of 32,000,000*l.*, at 7 per cent. interest and 1 per cent. sinking fund, but as only 20,062,658*l.* was even nominally received, these figures became 11·0 and 1·62 per cent., and the charge 12·62 per cent.; but of this 20,062,658*l.*, at least 9,000,000*l.* were paid into the Treasury in bonds of the floating debt taken at 93 per cent. The Treasury may therefore be held to have received 20,740,077*l.*, and the annual charge amounts to only 12·3 per cent. on this sum.

"A loan was raised for the construction of railways in 1866. Its nominal amount was 3,000,000*l.*, at 7 per cent. The amount received by the State was 2,640,000*l.*, which raised the interest to 8 per cent. The full amount of 3,000,000*l.* was repaid by six annual instalments of 500,000*l.* each, from the 1st of January, 1869, to the 1st of January, 1874, a rate equivalent to a sinking fund of 18·9 per cent.; so that during six years this loan entailed on the State an average charge equal to 26·9 per cent. of the amount realised.

"In addition to these regular State loans there are two Daira loans, which have been transferred to the State against value received. These are:—

"The Anglo-Egyptian Loan of 1865 for 3,000,000*l.*, at 9 per cent. interest, and sinking fund of 3·27 per cent., in all, 12·27 per cent.; and the Mustapha Pasha Loan of 1867 for 2,080,000*l.*, which was raised at 9 per cent., with a sinking fund of 3·4 per cent., in all, 12·4 per cent. Both of these loans will have been repaid by the end of 1881.

"The personal loan of the Khedive, raised on his private estates in 1870, was obtained on slightly more onerous terms than the State loans, excepting that for railways. To obtain 5,000,000*l.*, his Highness engaged to pay back 7,142,860*l.*, in twenty years, with 7 per cent. interest on this nominal amount. So that he really pays on the amount received 10 per cent. interest and 3·36 per cent. sinking fund, or a yearly charge of 13·36 per cent.

"The following Table shows these loans at a glance:—

Loan of—	To be Paid off in—	Nominal Amount of Loan, but Real Debt of State.	Charge on Nominal Amount.			Amount Realised.	Real Charges on Amount Realised.			Remarks.
			Interest.	Sinking Fund.	Total.		Interest.	Sinking Fund.	Total.	
		£	Per cent.	Per cent.	Per cent.	£	Per cent.	Per cent.	Per cent.	
1862	1892	3,292,800	7	1	8	...	...	...	...	No particulars of amount realised.
1864	1879	5,704,200	7	3·87	10·87	4,864,063	8·2	4·5	12·7	
1866	1874	3,000,000	7	...	...	2,640,000	8	18·9	26·9	Railways loan, repaid by six annual payments of £500,000, equivalent to a sinking fund of 18·9 per cent.
1868	1898	11,890,000	7	1	8	7,193,334	11·56	1·68	13¼	
1873	1903	32,000,000	7	1	8	20,740,077	10·8	1·56	12·36	
		55,887,000				35,437,474				
Daira taken over by the State.										
* 1866	1881	3,000,000	9	3·27	12·27	3,000,000	...	...	12·27	No particulars of amounts realised, but probably the whole.
* 1867	1881	2,080,000	9	3·4	12·4	2,080,000	...	...	12·4	
						5,080,000				
The Daira Loan of His Highness the Khedive.										
1870	1890	7,142,860	7	2·35	9·35	5,000,000	10	3·36	13·36	

"* The Return of the Finance Minister does not include these loans, which were probably expended on lands.

"From this Table it is seen that none of the Egyptian loans cost less than 12 per cent. per annum, while some cost more than 13¼ per cent. per annum, and the railways loan even 26·9 per cent. per annum, including sinking funds.

"A Return furnished by the Minister of Finance sets the amount paid for interest and sinking funds of the public loans to the end of 1875 at 29,570,994*l.*[1]

"According to the same Return, the revenue received from 1864 to 1875 inclusive amounted to 94,281,401*l.* During the same period the expenses of administration, including tribute to Constantinople, were 56,461,363*l.*; and the Government expended on the Suez Canal, on different works specified in the subjoined list, and on certain compensations and transactions, 56,654,722*l.*

"The debtor and creditor account of the State, from 1864 to 1875, stands thus:—

"RECEIPTS.

	£
"By Revenue	94,281,401
Loans	31,713,987[2]
Sale of Suez Canal Shares	3,976,583
Floating Debt	18,243,076
	148,215,047

"EXPENDITURE.

	£
"Administration	48,868,491
Tribute to the Porte	7,592,872
Works of utility, &c.	30,240,058
Extraordinary expenses—some of questionable utility, and others under pressure of interested parties	10,539,545
Interests and Sinking Funds	34,898,962
Suez Canal	16,075,119
	148,215,047

"Two striking features stand out in this balance-sheet, namely, that the sum raised by revenue, 94,281,401*l.*, is little less than that spent on Administration, Tribute to the Porte, Works of unquestionable utility, and certain expenses of questionable utility or policy, in all amounting to 97,240,966*l.*, and that for the present large amount of indebtedness there is absolutely nothing to show but the Suez Canal, the whole proceeds of the

"[1] According to the Loan Contracts the service of the loans should only have cost 27,923,716*l.* to the end of 1875. This sum may have been swollen by extra charges.

"[2] The greater part of the Loan of 1864 having been applied to the payment of the debts of the Khedive's predecessor, is not included in this return, which therefore differs from the amount given in the Table.

Loans and Floating Debt having been absorbed in payment of interest and sinking funds, with the exception of the sum debited to that great work. It is to be further observed in connection with this subject that the necessity of paying large amounts to the Suez Canal Company obliged the Egyptian Government to resort to its earlier loans in 1864 and 1868.

"The operation of the law of the Moukabala as above described is itself, perhaps, the most striking instance of the reckless manner in which the means of the future have been sacrificed to meet the pressing needs of the present. Before the law was enacted, the land-tax yielded as nearly as we can judge, 4,793,459*l.* a year. The operation of the Moukabala was to give to the Government six times this amount, or about 28,760,754*l.* Of this a part was to be returned in discount at 8½ per cent., and 2,396,729*l.* will have been so returned by the end of 1885, leaving to the Government a total of 26,363,888*l.*, the receipt of which will have been spread over fourteen years, in exchange for which the Government has surrendered in perpetuity revenue to the amount of nearly 2,500,000*l.* a year.

"The immediate pressure arises from the Khedive's inability to take up the bonds of his unfunded floating debt, now falling due at short intervals, and estimated by his Highness at 18,243,076*l.* at least, after deducting the 4,000,000*l.* which have been extinguished by the purchase-money of the Canal shares.

"This unfortunate position is due in great measure to the onerous conditions of the Loan of 1873, which was contracted for the express purpose of clearing off the floating debt, amounting at that time to 28,000,000*l.* By these conditions the nominal amount of 32,000,000*l.* was reduced to an apparent effective of 20,740,077*l.*, of which 9,000,000*l.* were paid in the bonds of the floating debt. These bonds, purchased by the contractors at a heavy discount, and sometimes at a price as low as 65 per cent., were paid into the Treasury at 93 per cent., an operation which materially enhanced the profits accruing to the negotiators of the loan.

"An examination of the contracts of the several loans shows that every available portion of the revenue has been pledged, sometimes more than once.

"The Loan of 1873 swallows up every resource. It is guaranteed, first by all the general revenues of Egypt, and then especially by—

"1. All the railway revenues of Lower Egypt, with a trifling exception. (This security is estimated at 750,000*l.*, but not limited to that amount.)

"2. The receipts from the personal and indirect taxes assessed at 1,000,000*l.*

"3. The receipts from the salt tax, 200,000*l.*

"4. 1,000,000*l.* a year from the Moukabala, or commuted land tax (of short duration).

"And lastly all the revenues already given in pledge to all other loans as they by degrees become liberated by the paying off of those loans.

"These last-named securities include—

"The revenue of Province of Rodat-el-Bahrein (the Delta).

"The Egyptian Customs duties.

"The bridge and lock dues.

"All the farmed duties, such as the duties on salt and fresh fish.

"Sheep tax.

"Oil tax.

"Duties on ferry-boats and barges.

"As, therefore, every security of real value is pledged, and as, without the means of meeting the floating debt, a very serious crisis in the financial affairs of Egypt must take place, which would be fatal to the interests of the bondholders under her various loans, it would seem that the most feasible mode of averting the danger would be to buy up, for the purpose of consolidation, the loans of 1860 and 1873, and the bonds of the floating debt. By this means the revenues now pledged would be liberated, and would be available as securities for a new loan, to be issued at a moderate rate of interest.

"There is, however, an essential condition on which the success of some scheme of this character depends, namely, that the Khedive should place a person who would command general confidence, such, for instance, as the financial agent sent out by her Majesty's Government to take employment under his Highness, at the head of a Control Department which should receive direct from the tax-collector certain branches of revenue to be defined, but comprising the land-tax and Moukabala, and should have a general supervision of the incidence and levying of the taxes.

"If the tax-collectors throughout the country were placed under the orders of this Department, it would have power to check frauds on the Exchequer on the one hand, and the extortion practised on the Fellaheen on the other. Inspectors should be sent round to take specimen districts, so as to ascertain what every peasant, every sakkia, every date-tree, every feddan has paid during the year, and to trace the amount through the various hands through which it passes before it reaches the Treasury. In this manner it might be proved whether the burdens on the people are aggravated by the misconduct of their head men, and how far the system prevails of collecting taxes at the wrong time of year—of levying perhaps one year's taxes at the end of the year, and again immediately after, at the beginning of the next, under which, it is to be feared, that three years' taxes are sometimes paid in two years.[1] The system of practically forced loans, which the peasant cannot distinguish from taxes, might also be inquired into; as also whether any special duties, such as those on date-trees, sakkias and shadoofs (methods of irrigation) lead to oppression and extortion.

"His Highness should undertake to consider the recommendations

"[1] These complications are likely to increase in consequence of the substitution of the Gregorian for the Coptic style at the commencement of the present year.

made to him by his Control Department, and to remedy any well-substantiated cases of maladministration that might be brought before him. By these means an important element of future wealth and prosperity would be introduced into the country: as the fellaheen, thus protected from oppression and able to employ the means now wrung from them by the tax-collectors, in excess of what comes into the State Treasury, would add materially to the present resources of the country.

"His Highness should further engage to make no fresh loans without the consent of the Control Department.

"The details of this plan can be worked out when the principle has been settled.

"With guarantees of this kind it might be possible to make the required arrangements, and the present debts having been replaced by one amount at moderate interest, there is no reason why the country should not quickly recover.

"The liabilities of the Egyptian Government are—

Loans.	Paid Off.	To be Paid.	Expires.
	£	£	
1862	775,800	2,517,000	1892
1864	572,200	2,132,000	1879
1868	67,480	10,722,520	1898
1873	686,343	31,313,657	1903
Moustapha, 1867...	922,500	1,157,500	1881
Daira Loan of 1865, backed by Treasury	1,542,688	1,457,312	1881
Floating Debt	...	18,334,960	
Abyssinian War expenses	...	1,000,000	

"The debts of the Khedive's Daira, which it is desirable to bring into the general arrangement, are as under:—

	£
"The Loan of 1870—	
Unpaid Capital	6,032,620
Floating Debt	3,000,000

"The present Revenue of Egypt consists of:—

	£
"Land Tax	4,305,131
Moukabala	1,531,118
Other sources of Revenue	4,852,821
	10,689,070

"These figures will probably be maintained till the end of 1885, and this revenue will go on increasing unless any unforeseen calamity befalls the country.

"In 1886 the Moukabala will cease, and the Land Tax will be diminished by the redemption of the tax, on a large portion of the land. On

the other hand, fresh lands which are already brought under cultivation will then have begun to pay tax, and it may be confidently expected that other lands now waste will in the next ten years have been brought under cultivation and become tax-paying. It is also reasonable to suppose that other sources of revenue will have become more productive.

"The Revenue of 1886 and following years may, therefore, be assumed to be at least equal to the following amounts:—

	£
"Land Tax	3,134,824
Other sources of Revenue (10 per cent. more than in 1876)	5,338,103
Total	8,472,927
In round numbers	8,473,000

"The amount of unpaid capital on the loans is as follows:—

Small Loans (nearly paid off).	Unpaid Capital.	Annuity.	Expires in.
	£	£	
1864	2,132,000	620,312	1879
Daira Loan of 1865 (Anglo-Egyptian) ...	1,457,312	368,350	1881
1867 (Moustapha)	1,157,500	258,024	1881
Annual amount		1,246,686	

The Larger Loans.	Unpaid Capital.	Annuity.	Expires in.
	£	£	
1862	2,517,000	263,972	1892
1868	10,722,520	953,303	1898
1873	31,313,659	2,565,670	1903
Daira (1870)	6,032,620	668,000	1890
Floating Debt of the State	18,243,076	...	...
Ditto of the Daira	3,000,000	...	...
Total	71,828,875	...	
Say	72,000,000	...	

"It might simplify any scheme for the consolidation of the debt if the loans which expire within the next six years, and whose annuities can be paid out of the revenue derived from the Moukabala, were excluded from it.

"In this case, in considering the amount of 72,000,000*l.* given above to be dealt with by consolidation and the resources to meet the annual charges upon it, the following points are to be noted:—

"As concerns the funded debt, the interest on the nominal amount of the loans with which alone we have now to deal is not excessive, but the sinking funds add to it a yearly charge which is too heavy for the revenue.

Were the term of repayment deferred, this charge would be lightened; it is, therefore, suggested that an offer might be made to the bondholders of these loans of a new stock at 7 per cent., repayable by the year 1926, instead of the bonds they now hold redeemable from 1892 to 1903. The inducement to these bondholders to accept the deferred payment would be the security given for the punctual payment of the debt charges, by the special Control Department, to be instituted by the Khedive as above described. A condition of the arrangement would be the transfer of the resources of the country from the service of special loans to the service of the whole debt.

"It may be expected that if the gravity of the situation is explained to the bondholders, they will consent to an arrangement for securing to them a fair return on their money, and saving them from the heavy loss inseparable from a financial collapse.[1]

"As regards the floating debt, it may be supposed that the holders of Treasury Bonds, which have been frequently renewed, and now represent a value far in excess of the amount paid to the Khedive, would willingly take bonds for the present nominal amount of these bonds with an assured interest and repayment.

"It remains to examine whether the resources of the country are equal to the payment of the necessary annuity for covering this payment of interest and sinking fund.

"As above shown, the amount of Funded and Unfunded Debt to	£
be paid off, independently of the three small Loans, is ...	72,000,000
If to this be added, for the expense of the Abyssinian War ...	1,000,000
And for the cost of this operation	2,000,000
We have a total amount of	75,000,000

"For the interest and sinking fund of which provision would have to be made. The annuity to repay this sum in fifty years with interest at 7 per cent. per annum would be 5,434,425*l.*, but as the Daïra Loan and Floating Debt have been taken into the operation, a proportion of this charge will fall on the private estate of the Khedive and not on the State; this proportion would be 672,608*l.*,[2] leaving 4,761,817*l.* to be furnished by the State.

"[1] It must be observed that, by clause 19 in the contract of the Loan of 1873, the Khedive engages to make no fresh loans before 1878, except to the extent of 10,000,000*l.* sterling for public works. It is alleged, however, that this engagement would not be broken by a loan for the purpose of funding existing debts.

"[2] The Loan alone, without the interest of floating debt, now costs the Khedive 668,000*l.* a year, so that this sum can be well borne; as shown by his Highness's Daïra account.

"The permanent charges of the Budget are:—

	£
" Tribute to Constantinople	685,308
Interest on Suez Canal Shares till 1895	198,829
Administration (including Civil List of His Highness and family)...	3,067,560
	3,951,697
Say	4,000,000
The Revenue of 1876 to 1885 should be	10,689,000
Less the Moukabala (which we propose to deal with separately) ...	1,531,000
	9,158,000
Deduct the permanent charge	4,000,000
	5,158,000
The charge for Interest and Sinking Fund ...	4,761,817
Leaves a working surplus of	396,183
But in 1886 and subsequent years we have shown that the Revenue will be only (except the growth that may be expected in the future)	8,473,000
Deduct permanent charge	4,000,000
	4,473,000
Service of Debt	4,761,817
Leaving a deficit of	288,817

"This deficit might be dealt with by reserving the produce of the Moukabala receipts. These receipts will be 1,531,818*l.* a year until the end of 1885.

"The charges on them will be:—

	£	Surplus. £
In 1876, Annuities of the Loans of 1864, 1865, 1867 ...	1,246,686	284,432
1877, ditto ditto	1,246,686	284,432
1878, ditto ditto	1,246,686	284,432
1879, ditto ditto	1,246,686	284,432
1880, Annuities of the Loans of 1865, 1867 ...	626,374	904,744
1881, ditto ditto	626,374	904,744
1882, ...	...	1,531,118
1883, ...	...	1,531,118
1884, ...	...	1,531,118
1885, ...	...	1,531,118
1886, ...	...	9,071,688

"This Reserve Fund would probably be increased by accruing interest up to 1885, or if circumstances should admit of a large portion of it being

employed in the redemption of bonds, it is clear that the diminution of charge would convert the deficit caused by the reduction of the land tax in 1886 into a surplus. The Moukabala should be absolutely vested in the Control Department, and be applied by it, so that security should thus be provided against possible fluctuations of revenue.

"It would appear from these calculations that the resources of Egypt are sufficient, if properly managed, to meet her liabilities, but that as all her available assets are pledged for the charges of existing loans, some fresh combination is necessary in order to fund at a moderate rate the present onerous floating debt.

"The annual charge upon the people of Egypt is heavy, and has increased; but the power of meeting it, that is, the wealth of the country as indicated by its exports, has increased in a far greater degree. And it must be remembered that this annual charge includes not only a sinking fund for the redemption of debt, but a very large proportion of what we should call local taxation. It also includes the cost of much that is done in this country by private enterprise, such as railways, canals, harbours, docks, &c., besides actual rent of lands belonging to the State, and repayment of advances during periods of scarcity and murrain.

"We gather from all the information that we have been able to obtain Egypt is well able to bear the charge of the whole of her present indebtedness at a reasonable rate of interest; but she cannot go on renewing floating debts at 25 per cent. and raising fresh loans at 12 or 13 per cent. interest to meet these additions to her debt, which do not bring in a single piastre to her Exchequer.

"STEPHEN CAVE."

APPENDIX No. 1.

CULTIVATED Lands in the Provinces of Upper and Lower Egypt in the Coptic Year 1591, corresponding to A.D. 1874-75.

	Feddans.	Feddans.	Feddans.
Lands subject to tax and borne upon the Register (Cadastre)—			
Kharadgis[1]	3,513,941		
Ouchoury[2]	1,291,166		
		4,805,107	
Lands not subject to tax and not borne upon the Register, viz.:—			
Ouchoury conceded in virtue of Taksids (Title of Concession) delivered by the Rouznameh, which have still to be made the object of an ulterior verification, according to which the tax will be fixed	352,350		
Lands distinct from the Register, and others for which no Taksid has yet been given, *i.e.*,			
Feddans.			
Taxable like the lands Ouchoury at the respective dates, conformably with the decision of the Chamber of Notables 70,000			
Subject to an ulterior verification and survey 197,650			
	267,650		
		620,000	
			5,425,107
Deduct—			
Lands cultivated under the preceding Government, that is to say, up to the year 1578 (September, 1862)—			
Kharadgis	3,505,179		
Deduct the lands of Rosetta, registered under the Government of Rosetta, and therefore deducted, because these lands were not registered under the Register of the Provinces as regards the year 1591 (1875)	806		
		3,504,373	
Ouchoury	...	547,603	
			4,051,976
Difference rendered cultivable under the present Government	...	...	1,373,131

[1] Lands paying tax assessed on value of produce.

[2] Lands paying a fixed tithe.

APPENDIX No. 2.

UNCULTIVATED Lands known according to the preceding Register made during the Reign of Mehemet Ali.

	Feddans.	Feddans.
Provinces of Lower Egypt—		
Mudirieh Garbiéh	550,000	
„ Béhéra	180,000	
„ Charkiéh	100,612	
„ Dakahliéh	49,955	
„ Galioubiéh	11,074	
		891,641
Provinces of Upper Egypt—		
Mudirieh El Ghizi-et-Attfeh...	25,000	
„ El Fayoum...	150,000	
„ Assiout	31,358	
		206,358
Total Feddans		1,097,999

Besides these lands, there exists in the Provinces of Gharbiéh, Charkiéh, Béhéra, and Dakahliéh about 1,500,000 uncultivated feddans not registered, without counting the area of lakes which may become dry.

APPENDIX No. 3.

DETAILS of the Number of Miles of Railways and Telegraphs established under the Government of His Highness the Khedive.

	Miles.	Total Miles.	Cost per Mile in Pounds Sterling.	Total Cost in Pounds Sterling.
Railways and Telegraphs established up to the end of September, 1873, *i.e.* —			£ s.	£
Railways	1,110		11,112 0	12,334,320
Telegraphs as far as the Soudan	9,298		90 16	844,258
		10,408		13,178,578
Railways and Telegraphs established in 1874 and 1875, *i.e.*—				
Railways	100		10,270 0	1,027,000
Telegraphs	145		60 0	8,700
		245		
Total Miles	...	10,653	Total ...	14,214,278

APPENDIX No. 4.

EXPORTS and Imports of Egypt during the Twenty-six Years from 1849 to 1875.

Period of 13 years under the Governments of Abbas Pacha and Said Pacha.					Period of 13 years under the Government of His Highness the Khedive.				
Exports.	Imports.	Year.	Corresponding years.		Exports.	Imports.	Year.	Corresponding years.	
£ sterling.	£ sterling.				£ sterling.	£ sterling.			
2,043,579	1,621,369	1265	1849	1850	9,014,277	3 063,487	1279	1862	1863
2,155,420	1,681,630	1266	1850	1851	14,416,661	5,291,297	1280	1863	1864
2,270,333	1,575 374	1267	1851	1852	13,045,661	5,753,184	1281	1864	1865
1,848,779	2,001,913	1268	1852	1853	9,723,564	4,662,210	1282	1865	1866
2,087,938	2,141,964	1269	1853	1854	8,623,497	4,399,097	1283	1866	1867
3,286,436	2,527,133	1270	1854	1855	8,094,974	3,582,969	1284	1867	1868
4,029,543	2,568,692	1271	1855	1856	9,089,866	4,021,601	1285	1868	1869
3,104,948	3,149,230	1272	1856	1857	8,680,702	4,502,969	1286	1869	1870
2,533,907	2,715,215	1274	1857	1858	10,192,021	4,512,143	1287	1870	1871
2,565,625	2,494,143	1275	1858	1859	13,317,825	5,005,995	1288	1871	1872
2,535,651	2,604,933	1276	1859	1860	14,208,882	6,127,564	1289	1872	1873
3,422,959	2,568,539	1277	1860	1861	14,801,148	5,322,400	1290	1873	1874
4,454,425	1,991,020	1278	1861	1862	12,730,195	5,694,820	1291	1874	1875
36,339,543	29,641,155				145,939,273	61,939,736			
Excess of exports, £6,698,388.					Excess of exports, £83,999,537.				

The excess of Exports during the above-mentioned period of the reign of His Highness the Khedive over the preceding period is thus £77,301,149, or about 1,154 per cent. upon £6,698,388.

APPENDIX No. 5.

COTTON Exported from Egypt during the Twenty-six Years from 1849 to 1875.

Period of 13 years under the Governments of Abbas Pacha and Said Pacha.				Period of 13 years under the Government of His Highness the Khedive.			
Quintals.	Rotolis.	Year.	Corresponding Years.	Quintals.	Rotolis.	Year.	Corresponding Years.
309,495	16	1265	1849-50	1,181,707	84	1279	1862-3
350,376	53	1266	1850-1	1,717,369	65	1280	1863-4
194,247	36	1267	1851-2	2,001,157	23	1281	1864-5
684,689	94	1268	1852-3	1,288,797	28	1282	1865-6
545,232	...	1269	1853-4	1,260,946	54	1283	1866-7
387,780	64	1270	1854-5	1,253,593	37	1284	1867-8
510,452	2	1271	1855-6	1,391,493	6	1285	1868-9
385,517	16	1272	1856-7	1,351,853	27	1286	1869-70
501,070	29	1274	1857-8	1,966,154	84	1287	1870-1
586,347	6	1275	1858-9	2,108,509	53	1288	1871-2
588,478	83	1276	1859-60	2,418,484	45	1289	1872-3
654,943	57	1277	1860-1	2,599,685	22	1290	1873-4
722,797	6	1278	1861-2	2,615,120	1	1291	1874-5
6,421,427	62			23,154,872	29		

The excess of Export during the above-named period of the reign of His Highness the Khedive over the preceding periods is thus 16,733,444 quintals and 67 rotolis, or about 257 per cent.

APPENDIX H.

The Financial Decrees.

Although the scheme for the unification of the Egyptian debt, based on the decrees of May 2 and 7 of last year, fell through, those decrees themselves technically survived, and though many of their provisions were abrogated by the later edict of November 18, giving effect to the substituted Goschen-Joubert project, some others are still in force, and all three of the decrees must therefore be read together.

The first—of May 2—prescribes the new organisation of the Ministry of Finance, which, it will be seen, has been since importantly modified:—

"DECREE.

"We, the Khedive of Egypt, having consulted our Privy Council, have decreed, and do hereby decree as follows:—

"Clause I.

"*Establishment of a Supreme Council of the Treasury, and its Functions.*

"Article I.—A Supreme Council of the Treasury is established, which will be divided into three Sections. The first of these will be denominated 'Section for the General Inspection of the Revenue and the State Treasuries;' the second, 'Section for the Control of the Revenue and Expenditure;' the third, 'Section for Auditing the Accounts.'

"The three Sections will work separately or conjointly, according to the arrangements provided for by the present Decree.

"Article II.—The first Section will be charged with the inspection of the Central Treasury and the supervision of its accounts. This inspection and this supervision shall be extended to any other Treasuries which may be established for any special service. The Section, or its delegated officials, shall have the right at all times to take cognizance of the state of its funds, and to audit its accounts.

"The reports of the inspectors charged by the Minister of Finance with the inspection of the other Treasuries and of the Inland Revenue Departments shall be communicated by him to the Supreme Council. This Section will superintend the due receipt of all revenues and their strict application to their proper purpose. Every abuse or irregularity shall be reported to the Supreme Council, and proceedings shall be taken against the responsible agents before the second Section in accordance with the articles

following. The inspector delegated by the Section can only take provisional resolutions. A resolution of the Section is requisite to make them definitive.

"ARTICLE III.—The second Section, either alone or conjointly, according to the provisions hereinafter contained, shall make a preliminary examination of all engagements which involve any expenditure chargeable to the State Budget, as also all orders or draughts or opening of credits in favour of officials authorised to issue bonds of payment to the amount of the sum placed at their disposal.

"B. The second Section shall audit these bonds of payments, and pronounce on the responsibility of the officials who may have incurred expenses or made payments without being authorised.

"C. If an engagement, or order, or draught fail to be met, or be not issued in the regular form, or if the same be incurred or issued by an incompetent authority, the Section shall bring the fact under the notice of the Minister of Finance, and, in case the Administration should persist, its act can only become legally valid by a decision of the Privy Council.

"D. Every engagement involving expenditure, every order or draught for payment or opening of credit, the amount of which, in conjunction with the sums of the like nature already incurred or disbursed, exceeds the Budget estimate, or creates a fresh expense for which no sum has been provided in the Budget, shall be suspended by a resolution explaining the reasons for such course. The Privy Council shall deliberate on the case, and if it considers the expenditure necessary, and if his Highness the Khedive approve it, a special decree shall be issued authorising the expenditure, indicating at the same time the ways and means for the same. In pursuance of such decree, the modifications or fresh entries necessary for providing for its execution shall be made in both the assets and liabilities of the Budget account. This Section shall watch over the prompt payment of all revenues into the Treasuries.

"ARTICLE IV.—At the request of the Minister of Finance, or on the reports of the inspectors transmitted to it through the medium of the Minister of Finance, the Section shall pronounce judgment, with power of execution, against any revenue officer who may receive sums without paying them into the Treasury indicated beforehand by the Ministry of Finance; also against any official or cashier who may not have made his payments regularly, or who may have made improper or irregular payments. Every payment shall be considered irregular and improper which is not made in conformity with the formalities prescribed by law, and such payment is null and void, and the person making it shall be held answerable for the same. Among the formalities, the most essential are those which the regulations prescribe for determining the legal authority for the payments by the various Treasuries, or order them to remit funds. In this case the Treasurer is responsible for payments made in pursuance of any other order or draught having a

different form. For discharging the responsibility of the payer it is sufficient that the form of the voucher be in order, and that the prescribed formalities be complied with, irrespective of the merits of the payment. In the case provided for in the preceding article, *sub literâ* D, if there be a disagreement between the members of the second Section on the definition of the expenditure, or on the sufficiency of the funds for the payment of the same, the question shall be regulated by the first and the second Sections conjointly; these two Sections shall also conjointly decide on the draughts and orders of payment which may be presented to the Treasuries without having been registered at the Council of the Treasury.

"ARTICLE V.—The third Section shall audit and settle the accounts of all accountants whose duty it is, by the regulations, to furnish the said accounts for audit. The examination of the accounts shall be effected by the officials of the Audit Department, whose duties will be laid down in Clause III. The estimate of the general account shall be fixed, and the general accounts of the Treasury shall be audited, by a union of the third with the first Section. Any accountant believing himself prejudiced by these audits shall have the right of subjecting them to a revision by the first and second Sections conjointly.

"ARTICLE VI.—The Supreme Council of the Treasury is entitled to demand from the Ministers and the chiefs of the different administrations of the State all information and all documents having reference to the exercise of its functions. It is also its duty to lay information with the Privy Council and the Ministers, giving notice at the same time to the Minister of Finance, of all infringements of the laws and regulations referring to the financial administration of the State, and which may come under its notice during the execution of the functions confided to it. It has also the task entrusted to it of presenting to the Privy Council, through the medium of the Minister of Finance, at the end of every financial year, a report on the general position of the Treasury, on the general progress of the account, and on the useful reforms which it would be possible to introduce into the public accounts and into the financial administration of income and expenditure.

"CLAUSE II.

"*Formation of the State Budget.*

"ARTICLE I.—Three months before the conclusion of every financial year the Minister of Finance will fix the Budget for the next year. The receipts and expenditure will be kept distinct, according to their nature, and specified as far as possible. The draught of the Budget will be submitted to the Supreme Council of the Treasury, to receive its advice and the ideas which it may be able to suggest in order to render its wording better and more exact.

"ARTICLE II.—At the end of every financial year a Treasury account

shall be drawn up, showing all payments actually made and all income actually received.

"ARTICLE III.—To the Budget Estimates already fixed for the ensuing year shall be added, under the designation of 'Residues of Assets,' all differences between the estimated revenue and income actually received, as also the other unrealised credits; and, under the designation of 'Residue of Liabilities,' the differences between the estimated expenditure and the payments actually made. After three months of the new year's administration these differences are to be reduced to their real value by fixing the estimated receipts and those in arrear, and the expenditure to be incurred, in a more just measure than had been done in the original estimates. The definitive Budget of the year is to be composed of these various elements.

"ARTICLE IV.—One copy of the Budget and the statements of the Residues of Assets and Liabilities, as also of their successive rectification, is to be handed to the Minister of Finance, and a second copy shall be deposited with the Supreme Council of the Treasury.

"CLAUSE III.

"Composition and Organisation of the three Sections of the Supreme Council of the Treasury.

"ARTICLE I.—The Supreme Council of the Treasury will be composed of ten councillors, of whom five will be natives and five foreigners, and of a president, who will be appointed by his Highness the Khedive. There will be a Secretaryship of the Council.

"ARTICLE II.—The first section will be composed of three foreign members. It will be presided over in rotation by one of its members in the order of their age. The President will remain in office for six months.

"ARTICLE III.—The second Section will be composed of five members —namely, four councillors, two natives and two foreigners, and of the President of the Council, who will also be President of the Section. This Section will choose a vice-president from its midst. One of the members of the Section is to be delegated by the same to fulfil the functions of the public ministry. The President of the Supreme Council will delegate one of the referendaries, of whom mention is made in Article VI. following, to exercise the functions of substitute of the Public Ministry. In dependence from this Section an office will be established for keeping the accounts in connection with the Budget, and for registering all documents submitted to its examination by virtue of the present decree.

"ARTICLE IV.—The third Section will be composed of three native members. A staff of six referendaries of accounts will be attached to this Section. Two of these referendaries, comprising the one who has examined the accounts in question, will take part and be entitled to vote in the Section called upon to audit them. Two of these referendaries are to be foreigners.

"ARTICLE V.—The appointment of the members of the council and of the Secretary-General will be made by virtue of a decree of his Highness the Khedive. Their appointments and other conditions are to be fixed by their respective contracts of service.

"ARTICLE VI.—No member of the Supreme Council can be ordered to resign, or to tender his resignation, or be deprived of his functions, unless by decree of his Highness the Khedive, based upon the advice of his Privy Council.

"ARTICLE VII.—The Supreme Council will make its own regulations for its internal administration, for the organisation of its Secretaryship-General and various offices, and for the distribution of its work.

"Done at Cairo, the 2nd day of May, 1876.

"ISMAÏL."

"DECREE.

"We, the Khedive of Egypt, in view of our decree dated May 2, 1876, relative to the establishment of a Supreme Council of the Treasury, M. le Commandeur Scialoja, Senator of the Kingdom of Italy, having consented to accept, provisionally and without fixed salary, the task of organising the Supreme Council of the Treasury, and of presiding over it, I entrust this mission to him by virtue of the present decree.

"Done at Cairo, the 14th day of May, 1876.

"ISMAÏL."

The document of May 7 decrees the unification of the debt, which, as before stated, could not be carried through. It provided, that—

"Whereas the loans contracted in 1862, 1864, 1868, 1873, 1865, 1867, and 1870 by the Government and the Daira Sanieh originally amounted to the sum of £65,497,660 sterling, and are now reduced to £54,793,150 sterling by the redemption of bonds effected up to this day;

"Whereas to these debts, contracted by means of loans with sinking funds, there is to be added the floating debt contracted both by the Government and the Daira in order to cover the deficit resulting from the partial non-execution of the contract relative to the loan of 1833,—not including the provision contained in Clause 19 of the said contract for the completion of the public works already in course of construction,—and also to meet the expenditure occasioned by circumstances beyond human control and by public calamities;

"Whereas this debt has to a great extent been contracted by means of credit operations which, having been forced upon the Government in critical periods or under other exceptional and urgent circumstances, have been concluded on conditions onerous for the State Treasury;

"Whereas, in order to make it possible for the Treasury and the Daira Sanieh to satisfy these different debts, and to better secure for the future the interests of the creditors by a measure in conformity with the public

exigencies, it has been found opportune and useful to unify all these debts by establishing one general debt, bearing interest at the rate of seven per cent., and redeemable within sixty-five years;

"Whereas, in view of the conditions of issue of the different loans with sinking funds attached, the bonds belonging to these loans, to be unified at par of their nominal value, receive a benefit which it is only just to extend to the holders of bonds of the floating State debt and of the Daira Sanieh in a proportion which shall establish as far as possible an equality between all creditors, and it is also equitable to accord to the holders of the 1864, 1865, and 1867 loans, the last payments of which are shortly falling due, a compensation for the relatively greater prolongation of the sinking fund operations;

"Whereas, the yearly sum necessary for the service of the general unified debt, amounting to £91,000,000 sterling, will be £6,443,600 sterling, but, in order to determine the real charge which will actually be chargeable in the ordinary State Budget, it is necessary to deduct from that sum £684,411 sterling, being the contribution of the Daira Sanieh in proportion to the amount of its debt unified with the State Debt, and thus the annual charge on the State remains at £5,759,189 sterling;

"Whereas, the unification and the consolidation of the State debts into one general debt, make it inopportune to continue the payment of the Moukabalah, by which the Government had intended to arrive at the extinction of the floating debt by anticipating the Land Tax in six yearly amounts;

"Whereas, in consequence of this anticipation, one of the most important revenues of the State would after some years be considerably reduced, while in the interest both of the Government and of the State creditors it is necessary that the revenue of the Treasury be secured, so as to satisfy the interest and the redemption of the Public Debt and also the Budget expenditure;

"Whereas, for these reasons our Privy Council has proposed to us, and we have approved, to arrest the operation of the Moukabalah by according to those who have made anticipatory payments all rights and privileges over the property which they would only have definitively acquired after the full payment of the Moukabalah, and to take equitable measures either for the restitution of these anticipatory payments or for a proportionate reduction of taxes, the result of which will be to obviate a considerable reduction in one of the principal sources of the State revenue;

"Whereas, further for the security of the creditors, it has become necessary to establish a special Treasury charged with receiving the amount of revenue devoted to the service of the Debt;

"We, the Khedive of Egypt, after consulting our Privy Council, have decreed, and do hereby decree, as follows:—

"ARTICLE I.—All the debts of the State and those of the Daira Sanieh, resulting from loans contracted in the years 1862, 1864, 1868,

1873, 1865, 1867, and 1870, the floating debt of the State, and the floating debt of the Daira Sanieh, including the Treasury Bonds and all other bonds or obligations, are unified into a general debt, the bonds of which shall bear interest at the rate of 7 per cent. on the nominal capital, and shall be redeemable in sixty-five years by half-yearly drawings. The unification is effected at par of the nominal amount of the bonds of the old 1862, 1868, 1870, and 1873 Loans. The bonds of the general debt shall be delivered at the rate of 95 per cent. of their nominal capital to the holders of Seven per Cent. Bonds of the 1864 and 1865 Loans, and of the Nine per Cent. Loan of 1867. For this latter loan the difference of the percentage of interest shall be capitalised at the rate of 70 per cent. of the nominal capital, and at the rate of 80 per cent., to the holders of the bonds of the floating debts of the State and the Daira Sanieh, in the form of Treasury Bonds, or other bonds and obligations which constitute them. By virtue of this operation the general unified debt will amount to £91,000,000 sterling nominal, to bear interest from the 1st of July, 1876.

"ARTICLE II.—The loan debt and floating debt of the Daira Sanieh being unified with that of the State under the same restrictions and guarantees, the Daira Sanieh is bound to pay annually into the Treasury of the Public Debt the sum of £684,411 sterling, representing its proportion of the total yearly amount necessary for the interest and sinking fund of the Debt.

"ARTICLE III.—The revenue specially devoted to the service of the General Debt are:—Moudirieh de Garbieh, £1,201,523 sterling; Moudirieh de Menouieh, £714,107; Moudirieh de Behera, £424,213; Moudirieh de Siout, £732,179; octroi dues of Cairo, £345,389; octroi dues of Alexandria, £137,837; import duties of Alexandria, Suez, Damietta, Rosetta, Port Said, and El Arish, £659,677; railways, £990,806; tobacco dues, £264,015; salt revenues, £200,000; the rent of Materieh, £60,000; sluice revenues and navigation dues on the Nile up to Wadyhalfa, £30,000; bridge of Kasr-el-Nil, £15,000—total, £5,790,845 sterling. Contribution of the Daira, which is to be paid immediately upon the money coming in, £684,411; general total of revenue devoted to the service of the Unified General Debt, £6,475,256.

"ARTICLE IV.—The bonds of the General Unified Debt shall be issued in sums of £20, £100, £500, and £1,000 sterling, with coupons payable half-yearly. The drawings of bonds for the half-yearly redemption will be effected by the Managing Commissioner of the Treasury of the Public Debt. These bonds shall be delivered in exchange for the bonds of the old loans and the bonds of the floating debt on the conditions prescribed in Article I. of the present decree.

"ARTICLE V.—A group composed of banking houses and financial establishments has undertaken by contract the operation of the unifica-

tion of the Debt. Special Government Commissioners shall be appointed by us to watch over the regular execution of these operations.

"ARTICLE VI.—For the service of the Unified Debt a special Treasury is created, the statutes of which are laid down in our preceding decree, which is to be considered as complementary of the present decree.

"ARTICLE VII.—Our Minister of Finance is charged with the execution of the present decree.

"Done at Cairo, the 7th day of May, 1876. "ISMAÏL."

"DECREE.

"We, the Khedive of Egypt, desiring to take definitive and opportune measures for obtaining the unification of the different debts of the State and those of the Daira Sanieh, and also desiring the reduction of the excessive charges resulting from these debts, and wishing to bear solemn testimony to our firm intention to secure every guarantee to all persons interested, have resolved to establish a special Treasury charged with the regular service of the Public Debt, and to appoint to its management foreign Commissioners, who at our request will be indicated by the respective Governments as fit officials to fill the post to which they will be appointed by us in the quality of Egyptian officials and under the following conditions. Having consulted our Privy Council, we have decreed, and do hereby decree as follows:—

"ARTICLE I.—A Treasury of the Public Debt is established, charged with receiving the fund necessary for the interest and the redemption of the Debt, and with applying them to this object exclusively.

"ARTICLE II.—The officials of the local treasuries or special administrations, after collecting, receiving or accumulating the revenues specially devoted to the payment of the Debt are or shall be in future charged to pay them into the Central Treasury or to keep them at the disposal of the intendants of public expenditure (*ordonnateurs des dépenses de l'Etat*). The intendants of public expenditure are, by virtue of the present decree, bound to pay these revenues on account of the States Treasury into the special Treasury of the Public Debt, which will be considered in this respect as a special treasury. These officials, treasuries, and administrations can only procure a valid discharge by means of the vouchers which will be delivered to them by the said Treasury of the Public Debt. Any other order or voucher will not be valid. These same officials, treasuries, or administrations will every month send to the Minister of Finance a statement of the receipts or collections made by themselves directly or paid in by the receivers of the revenues specially devoted to the Debt and the payments made into the special Treasury of the Public Debt. The Minister of Finance will communicate these statements to the Administration of the Treasury of the Public Debt.

"The Treasury of the Public Debt shall receive from the Daira Sanieh the entire sum necessary for the interest and redemption of the amount

of its unified debt, and it shall likewise receive the funds for the yearly payment due to the English Government, and representing the interest on the Suez Canal Shares.

"ARTICLE III.—If the payments of the revenues devoted to the debt be insufficient to meet the half-yearly charges, the Special Public Debt Department will refund to the Treasury, through the intermediary of the Minister of Finance, the sum required to complete the half-yearly payments; the Treasury will have to deliver this sum a fortnight before the payments are due. If the funds in hand constitute a surplus over the amount necessary for the payment of the interest and the sinking fund, the Special Treasury of the Public Debt will pay this surplus at the end of each year to the general Treasury of the Exchequer. The Treasury of the Public Debt will submit its accounts, which will be examined and reported upon according to law.

"ARTICLE IV.—The suits which the Treasury and its Directors, on its behalf, acting in the name and in the interests of the creditors, mostly of foreign nationality, may consider they have to bring against the financial administration represented by the Minister of Finance in so far as regards the guardianship of the guarantees of the Debt which we have confided to the said Treasury, will be brought in the terms of their jurisdiction before the new tribunals which, in conformity with the agreement entered into with the Powers, have been instituted in Egypt.

"ARTICLE V.—The Commissioners selected as stated above will have the direction of the special Treasury of the Public Debt. They will be appointed by us for five years, and will sit in Cairo. Their functions may be continued after the five years have expired, and in case of the death or resignation of one of them the vacancy will be filled by us in the manner of the original appointment. They may intrust one of themselves with the functions of President, and the latter will notify his nomination to the Minister of Finance.

"ARTICLE VI.—The cost of exchange, insurance, and conveyance of specie abroad, as well as the commission for the payment of the coupons, will be borne by the Government. The Directors of the Treasury will come to a previous arrangement with the Ministers of Finance with regard to all these operations, but the Minister will decide whether the despatch of these sums is to be effected in specie or by letters of exchange.

"ARTICLE VII.—The Treasury will not be allowed to employ any funds, disposable or not, in operations of credit, commerce, industry, &c.

"ARTICLE VIII.—The Government will not be able, without an agreement of the Commissioners directing the Treasury of the Public Debt with the majority, to effect in any of the taxes specially devoted to the Debt any changes which might result in a diminution of the revenue from these taxes. At the same time, the Government may farm out one or several of these taxes, provided that the contract entered into insure a

revenue at least equal to that already existing, and may also conclude treaties of commerce introducing modifications in the custom duties.

"ARTICLE IX.—The Government undertakes not to issue any Treasury Bonds or any other new bonds, and not to contract any other loan of any nature whatsoever. This same engagement is entered into in the name of the Daira Sanieh. Nevertheless, in case the Government from urgent national reasons should find itself placed under the necessity of having recourse to credit, it may do so within the limits of strict necessity, and without doing anything to affect the employment of the revenues set apart for the Treasury of the Public Debt, or to cause their diversion from their destination. These totally exceptional loans can only be contracted after an agreement on the subject with the Commissioners directing the Treasury.

"ARTICLE X.—In order that the arrangements stated in the preceding article shall not place obstacles in the way of the Administration, the Government may open a running account with a bank to facilitate its payments by means of anticipations to be regulated in accordance with the year's receipts. The debt or credit balance will be settled at the end of each year. This current account must never be overdrawn during the year by more than 500,000,000f.

"Done at Cairo, the 2d of May, 1876.

"ISMAÏL."

Importantly modifying what precedes, the decree of November 18 substitutes the new scheme of Messrs. Goschen and Joubert for that of the previous French group, and adds administrative guarantees which give the new project its chief value:—

"DECREE.

"We, the Khedive of Egypt, considering that the Decree of the 7th of May, 1876, relating to the unification of the debts of the State and of the Daira requires certain modifications in its application;

"Considering the Decree of the 2nd of May, 1876, establishing the Treasury of the Public Debt, and desiring to strengthen still further the functions of the Commissioners who administer the said Treasury;

"Considering that the suppression of the law of the Moukabalah raises unanimous objections on the part of those whom it affects, and that the Chamber of Delegates has given expression to the desire that the law should be maintained;

"In our firm desire to assure the regular course of the public services, while at the same time protecting the interests of the creditors by more efficacious guarantees;

"And having heard our Privy Council, we have decreed and decree:

"FIRST DIVISION.

"*Finances.*

"ARTICLE I.—The Debts of the Daira, as set forth in the Tables A and B inserted in the present Decree, are separated from the Debts of the State, and are not included in the unification of the General Public Debt. These debts will form the subject of a special arrangement.

"ARTICLE II.—The law of the Moukabalah is re-established, and is considered as never having ceased to be in force. Nevertheless, the annual reductions produced by the effect of the law of the Moukabalah will not come into force until the commencement of the year 1886, and an annual interest of five per cent. will be credited to the contributaries up to the end of the year 1885 on the sums which should be deducted.

"The whole sum produced by the Moukabalah will be applied to the redemption of the Loans of 1864, 1865, and 1867, and of the unified debt.

"In the employment of the available (*disponibles*) funds yielded by the Moukabalah, certain reservations are made which are dealt with in Article 6 relating to 'amortisation.'

"ARTICLE III.—A special administration of the railways and of the port of Alexandria is established, which will be placed under the direction of a Commission, as will be set forth hereafter.

"The revenues of the railways and of the port of Alexandria will be directly applied to the payment of the interest and the sinking fund of a series of Preference Bonds having a special mortgage on the railways and the port of Alexandria, amounting to seventeen millions sterling, and bearing interest at 5 per cent., redeemable in sixty-five years. Interest to run from the 15th of October, 1876.

"These Bonds will be offered by preference to the holders of the Loans of 1862, 1868, and 1873, in exchange for Bonds of these Loans bearing 7 per cent., which Bonds will be cancelled.

"The annuity necessary for the service (Interest and Sinking Fund) of the Preference 5 per cent. Bonds, amounting to £885,744, and payable in two half-yearly payments of £442,872 each, will form the first charge on the Revenues of the Railways and of the port of Alexandria, and will remain, in every eventuality, the first liability of the Commission of the Public Debt.

"ARTICLE IV.—The Loans of 1864, 1865, and 1867 are deducted from the unified Debt.

"They will continue to bear the interest appertaining to them until their complete redemption.

"They will be redeemed within the terms of their respective contracts. They will be redeemed, however, at the rate of 80 instead of at 100 per cent., and the first half-yearly payment on account of this redemption will be postponed by six months: that is to say, it will take place for the Loan of 1864, on the 1st of April, 1877; for the Loan of 1865, on the 7th of July, 1877; and for the Loan of 1867, on the 22nd of May, 1877.

"ARTICLE V.—The Bonus of 25 per Cent., granted by the Decree of the 7th of May last to the holders of the Floating Debt, is reduced to 10 per cent.

"By the effect of these measures, the financial position will be as follows :—

A. The Bonus included in the Table of Unification annexed to the Decree of 7th May amounting to ...		£6,204,327
is reduced—		
1st. By the entire Bonus on £2,906,151, the amount of the Floating Debt of the Daira	£726,537	
2ndly. By the Bonus on the Loans of 1864, 1865, and 1867	306,796	
3rdly. By the reduction of the Bonus granted to the Floating Debts of the Malieh and of the Daira on the Malieh, viz., £5,170,993, 3/5ths of which representing the 15 per cent. to be deducted, is	3,102,597	
		4,135,930
		£2,068,397
B. The Unified Debt of		£91,000,000
will be reduced as follows by these several deductions :—		
1st. The Consolidated Debt of the Daira	£5,909,280	
2ndly. The Floating Debt of the Daira	2,906,151	
3rdly. The Loans of 1864, 1865, and 1867	4,392,616	
4thly. The Railways and the Port of Alexandria ...	17,000,000	
5thly. Sundry Bonuses (as above)	4,135,930	
		34,343,977
		56,656,023
There accrues to the Government on account of the Port of Alexandria, which is given as a guarantee, two millions in Bonds of the General Debt		2,000,000
Balance at the disposal of the Government... ...		343,977
Total of the Unified Debt		£59,000,000

"To this debt of fifty-nine millions an annuity of £4,177,720 sterling is assigned representing its redemption in sixty-five years, and interest at the rate of 7 per cent. upon the capital. Interest to run from 15th July, 1876.

"This annuity is payable in two half-yearly payments of £2,088,860 each.

"The revenues which are at present assigned to the Treasury of the Public Debt by our Decree of the 7th May, 1876, remain pledged as before, subject to the modifications which will result from the present Decree, which will be arranged by the Controllers-General to be mentioned hereafter, and by the Commissioners of the Public Debt.

"The £2,000,000 in Bonds of the General Debt accruing to the Government for the Port of Alexandria are not to be disposed of until after the entire payment of the amount of £704,000 due on the 1st of January, 1877, to the Contractors of the Port.

"SECOND DIVISION.

"*Amortisation.*

"ARTICLE VI.—The operation of redeeming the Bonds will be carried out by the Commissioners of the Treasury of the Public Debt. In order to increase the amount available for redemption, a deduction will be made of one-seventh of the interest of 7 per cent., which is assigned to the service of this debt, viz. :—1 per cent. on the capital remaining to be redeemed at the beginning of each year.

"The fund yielded by this deduction will be added to the sums available from the Moukabalah, and will be also employed in redeeming Bonds by means of public purchases, subject to the reservation mentioned hereafter, in case of public purchases not being made.

"This deduction, however, will only be made to the end of the year 1885 at the latest, and if before that date the unified debt is reduced to forty millions sterling, payment of interest at 7 per cent. will be resumed from that moment.

"The funds yielded by the Moukabalah will be paid in their entirety to the Commissioners of the Public Debt, to whom the service of redemption is confided ('*service d'amortissement*'). The Commissioners of the Treasury of the Public Debt will take out of the funds paid to them the sum necessary for the redemption of the 1864, 1865, and 1867 loans, and they will devote the available balance to the redemption of the general unified debt.

"In the event that after the service of the Public Debt shall have been provided for, the revenues should be insufficient to meet the estimated budget expenses of the Government, such as they are fixed in the table annexed to the present decree, the Finance Committee, composed of the Minister of Finance and the two Controllers-General, will give notice thereof to the Commissioners of the Public Debt. The latter will then keep back out of the available funds yielded by the Moukabalah and intended for the redemption of the unified debt, the sum necessary to make up the difference.

"In order to be in a position to meet this liability, the Commissioners of the Public Debt will keep in hand (*conservera dans ses caisses*) out of the available sums yielded by the Moukabalah and assigned for the redemption of the Public Debt, a sum of £600,000 per annum. This sum can only be sent to Europe after a notification of the Finance Committee mentioned above.

"If, on the other hand, there is an excess of Revenue after the charge

for the Public Debt and the Budget expenses above mentioned have been met, this excess is to be added to the Redemption Fund.

"The amortisation, both by the deduction of 1 per cent. and by the sums remaining available from the Moukabalah and the Budget surpluses, is to be conducted by means of public purchases so long as it will be possible to effect these purchases below the price of 75.

"In the event that during the period of the Moukabalah purchases cannot be made at a rate below 75, the amortisation is to take place by drawings at the rate of 75. As soon as the increments of revenues shall produce a Budget surplus of 150,000*l.* per annum, the amortisation will take place at the rate of 80.

"THIRD DIVISION.—ADMINISTRATION.

"*Controllers-General.*

"ARTICLE VII.—Two Controllers-General will be appointed, the one a Controller-General of Receipts, the other a Controller-General of Audit (*comptabilité*) and of the Public Debt.

"ARTICLE VIII.—The functions of the Controller-General of Receipts are the following:—

"1st. The collection of all the Revenues of the State, and their payment into the receiving offices, to which they belong (*dans les caisses respectives*).

"2ndly. He will have under his direction all the collectors, except the officials charged with the collection of Judicial Fees and others attached to the tribunals of the Judicial Reform (*Tribunaux de la Reforme*).

"3rdly. He will propose their nomination to us through the channel of the Minister of Finance.

"He will have the right to suspend them from their functions, and he can also dismiss them after a regular inquiry, with the concurrence of the Finance Committee, composed of the Minister of Finance and the two Controllers-General.

"The Collectors of Taxes in the Provinces (Moudiriehs) will be chosen from amongst Egyptian subjects, who are not disqualified by any such legal incapacity as may be provided against by law.

"4thly. It will be his duty to see that the Agents of Collection do not collect more than the authorised taxes. Collection cannot be enforced on the Tax Papers of the direct taxes, until after they have been countersigned by him.

"5thly. It will be his duty to see that the produce in kind belonging to the revenues is realised to the best advantage of the Treasury. The Finance Committee will look to the best means of realising its value.

"ARTICLE IX.—The Controller-General of Audit and the Public Debt will have to fulfil at the same time the functions of 'Councillor to the Ministry of Finance.'

"These functions will be the following:—

"1stly. It will be his duty to see to the execution of all the Regulations affecting the Debts of the State, without trenching on the functions which belong to the Commissioners of the Public Debt.

"2ndly. He will control the general account keeping of the Treasury, and of all the Government Receiving Offices (*Caisses de l'Etat*).

"3rdly. The Ministers or heads of administration will have the regulation of all the expenses. The cheques or orders for payment (*des mandats ou assignations*) which they may issue must be countersigned by the Controller-General, in order to be honoured.

"4thly. The Controller-General will not have to judge of the expediency of the expenditure of the Government. He can only refuse his counter-signature to orders to pay (*mandats*) which would exceed the amount of the credits still open, or which would prevent sufficient funds remaining in hand to meet the balance of expenditure still to be incurred under the estimated Budget of the current year.

"ARTICLE X.—The Controllers-General will take part in the preparation of the Budget. They are not to encroach upon the functions of the Ministers, who will remain sole judges of the necessity of assigning credits to services of such and such a nature. Accordingly the Budget will be prepared by the Minister of Finance, who will centralise all the demands for credits made by the heads of departments.

"The Budget having been thus prepared, will be submitted to the Council of Ministers, to which the two Controllers-General will be summoned.

"When the Budget has been examined and revised, if necessary, it will be submitted by the Council to our approbation.

"The Minister of Finance and the Controllers-General will see to the strict execution of the Budget.

"ARTICLE XI.—The Finance Committee will have to give their approval, in the first instance (*préalablement*), to all contracts entailing pecuniary engagements which would exceed $\frac{1}{12}$th of the credits open for the year, or which would be applicable to several years.

"ARTICLE XII.—It will be the duty of the Finance Committee to draw up the general regulations in the matter of public accounts (*en matière de comptabilité publique*), under our sanction.

"ARTICLE XIII.—Of the two Controllers-General one will be an Englishman, and the other a Frenchman.

"ARTICLE XIV.—The nomination and the choice of the Controllers-General will belong to us; but in order to satisfy ourselves with regard to the guarantees offered by the persons whom we may choose, we shall address ourselves unofficially (*officieusement*) to the English and French Governments, and we shall only engage persons who are furnished with the authority, or with the acquiescence of their Governments. If one or the other of these Governments, at the time when the nominations have to be made, should not give its authority or its acquiescence, our choice will

be made amongst the higher officials of the two countries, either in active service or retired.

"ARTICLE XV.—The two Controllers-General will be named for five years. In case of their resignation or their death, the proceedings taken to replace them will be the same as those taken for their nomination.

"ARTICLE XVI.—The two Controllers-General will have the same rank, and will receive the same remuneration.

"ARTICLE XVII.—They will be accountable only to us.

"*Commission of the Public Debt.*

"ARTICLE XVIII.—The Commission of the Public Debt is permanent until the entire debt is redeemed.

"ARTICLE XIX.—The Commissioners will have the right to send the funds which they will have encashed, direct to the Bank of England, and to the Bank of France. They will have the necessary powers to make this transmission of funds; but it will be their duty to come to an understanding beforehand with the Minister of Finance and the Controllers-General.

"ARTICLE XX.—An English Commissioner will be added to the Commission of the Public Debt. The nomination and the choice of this Commissioner will belong to us; but in order to satisfy ourselves with regard to the guarantees offered by the person whom we shall choose, we shall address ourselves unofficially to the English Government, and we shall only engage a person furnished with the authority and acquiescence of his Government. If the English Government, at the time when this nomination is to be made, should not give its authority or its acquiescence, we should make choice of a higher official in the English service, either on the active or on the retired list.

"ARTICLE XXI.—The merchandise or produce given for payment of taxes in the provinces specially set apart for the service of the debt, will be placed at the exclusive disposal of the Commissioners of the Debt, who will have the power to sell it; coming, however, to an understanding (*en se concertant toutefois*) with the Minister of Finance and the Controllers-General as to the best means of realising it.

"ARTICLE XXII.—The members of the Commission of the Public Debt will not be able to accept any other functions in Egypt.

"*Railways and Port of Alexandria.*

"ARTICLE XXIII.—The railways which are now actually being worked, and the Port of Alexandria, will be placed under a Special Administration, which will be accountable only to us. This administration will be composed of five Administrators, of whom two will be English, one French, and two natives. One of the two English Administrators will have the functions of President.

"ARTICLE XXIV.—The annexation of the Administration of the Port of Alexandria to the Special Administration of the Railways, and the

application of their revenues to the service of the Preference Debt, are not in any case to prejudice the contracts already existing with the Contractors, nor to modify the relations of the Government to the latter with regard to the work which is still to be executed.

"ARTICLE XXV.—The nomination and the choice of the Administrators will belong to us; but in order to satisfy ourselves with regard to the guarantees offered by the foreign Administrators whom we may choose, we shall address ourselves unofficially to the Governments of England and France, and we shall only engage persons furnished with the authority or the acquiescence of their Governments. In the event that one or the other of these Governments should not give its authority or its acquiescence, our choice will be made amongst the higher officials, either civil or military, of the two countries, or of their great Railway Companies, either in active service or on the retired list.

"ARTICLE XXVI.—The foreign Administrators will be named for five years. In case of their resignation or their death, the same proceedings will take place for replacing them as have been fixed for their nomination.

"ARTICLE XXVII.—The Administration, formed as described above, will continue to act until all the privileged Bonds specially created have either been redeemed or paid off. The Port of Alexandria being comprised in this guarantee for the sum of £2,000,000, can be freed from this guarantee and detached from the Joint Administration as soon as £2,000,000 of these Preference Bonds shall have been redeemed or repaid.

"The Railways being comprised in this guarantee for £15,000,000 sterling in Preference stock, can be freed by the redemption or the repayment of £15,000,000 of this Stock.

"ARTICLE XXVIII.—The Administrators will propose for our choice and nomination the superior employés of the Railways and the Port.

"They will name the other employés direct.

"They will have the right to suspend all the employés from their functions; they may also dismiss them after a regular inquiry.

"They alone will have the right to make any modifications in the tariffs and in the regulations in force, under our sanction.

"They will be exclusively charged with the duty of making contracts for the purchase of rolling stock or of fixtures, and for the matériel necessary for the working of the Railways and the service of the Port.

"They will decide on the necessity of repairs in the matériel or the permanent way, as well as for the maintenance of the Port, all under our approval.

"ARTICLE XXIX.—Provision will be made from the general resources of the Budget for extraordinary expenses which will have been decided on by the Administrators and approved by us.

"ARTICLE XXX.—All the receipts of the Railways and of the Port of Alexandria according as they come in, with the exception of what is necessary for the ordinary outlay for maintenance and for working

expenses, and with the exception of the rights of the Contractors of the Port provided for in the contracts, will be paid in to the Treasury of the Public Debt, to which they are assigned.

"ARTICLE XXXI.—The Commission of the Public Debt will open a special account for the service of the Preference 5 per Cent. Bonds. The Commission will be bound to send any funds which are paid into it by the Administration of the Railways and the Port, to the Banks of England and France, and likewise to a special account opened for the service of the Preference Stock issued on the Railways and on the Port.

"ARTICLE XXXII.—In the event that the payments made by the Administration of the Railways and of the Port should be insufficient for the service of this Debt, the Commission of the Public Debt will have to provide for the service by taking as a first charge the necessary amount from the general resources which are assigned to it.

"ARTICLE XXXIII.—All the provisions of our Decrees of the 2nd and 7th May, 1876, which are not contrary to these presents remain in force.

"Given at Cairo the 18th November, 1876.

"(*Signed*) ISMAÏL.

"On behalf of the Khedive,

"*The Minister of Finance,*

"(Signed) HUSSEIN-KIAMIL."

TABLE of the Expenditure of the Egyptian Government mentioned in Article VI. of the above Decree.

Year 1877	... ...	£4,259,350	
„ 1878	... ...	£4,403,961	
„ 1879	... ...	£4,500,000	
„ 1880	... ...	£4,500,000	
„ 1881	... ...	£4,500,000	
Year 1882	... ...	£4,500,000	
„ 1883	... ...	£4,500,000	
„ 1884	... ...	£4,500,000	
„ 1885	... ...	£4,500,000	

RECEIPTS.	Brs. ps.	Brs. ps.
Provinces of Upper and Lower Egypt—		
Tax on lands, either Kharaghis or Ouchoury ...	839,500 323	
Tithes on date trees ...	36,934 81	
Patents (licenses)	82,346 132	
Octroi, duties on sheep and other duties	98,517 338	
Moukabala on lands ...	314,858 128	
		1,372,157 2
Customs	...	124,737 287
Net revenue from railways	...	193,207 28
Revenues from the octroi of Cairo and Alexandria, revenues from the Governments and Prefectures of Police of Cairo, Alexandria, Damietta, Rosetta, Suez, Ariche, Port Said, and Ismaïlia .	...	140,523 404
Salt Revenues	...	50,000
Revenues from the locks of the Mahmoudiéh Canal; from "barrages," ports, and bridge of Kasr-el-Nil...	...	32,313 87
Lease of Mattarieh (salt fish), duties on sales; and other duties collected by the Minister of Finance	...	106,236 237
Tobacco duties	...	51,483 488
Revenues from the Soudan	...	30,000 000
Total bourses ...	...	2,100,659 33
	Say equal to	£10,772,611

BALANCE.	£
Receipts	10,772,611
Expenditure	8,981,852
Surplus	1,790,759

Which will serve for paying off the interest on the Floating Debt.

EXPENDITURE.	Brs. ps.	Brs. ps.
Tribute to Constantinople	...	133,635 62
Civil List of His Highness the Khedive	...	60,000 000
Annual allowance to His Highness the Prince Heritier	...	6,000 000
Sum due annually to His Highness the Prince Halim Pasha, by agreement ...	...	11,700 000
Appointments and expenses of the Ministry of Finance and its dependencies, and the Administrations included under it, as follows—		
The Maïa Sanieh (Cabinet) of His Highness the Khedive	4,338 66	
Personnel and employés of the Privy Council	2,088 127	
Ministry of the Interior	1,596 208	
Ministry of Foreign Affairs	2,155 130	
Ministry of Justice	16,448 26	
Ministry of Finance, Moukabala Commission, and Accounts	10,862 243	
Various pensions and allowances, registered under the Ministry of Finance .	53,193 153	
Various expenditure, ditto	20,325 316	
Conseil d'Etat, Court of Appeal, Court of First Instance at Cairo, and the Chamber of Notables	3,242 268	
Irregular Troops	5,792 374	
Egyptian Museum, Canal d'Ismaïlia, Office of the Suez Canal Engineers, Liquidation Department, Commission for Arrears, Archives, Provisions & Stores, &c.	6,633 297	
Customs	5,823 403	
Administration of the Mattarieh (salt fish)...	1,077 296	
Foreign Agents	2,881 349	
Expenses on account of the Philadelphia Exhibition	2,244 66	
		138,703 322
Appointments and expenses of the Provinces of Upper and Lower Egypt	...	36,546 380
Appointments and expenses of the Governments, Prefectures, and Dependencies and Octroi, including the service of Public Ways, as follows:—		
Cairo (including Hospital and Patients' expenses)	41,293 179	
Alexandria, ditto	20,306 313	
Damietta, Rosetta, Suez, Ariche, Port Said, and Ismaïla	12,484 461	
Octroi	5,219 368	
		79,304 321
Appointments and expenses of locks and "barrages" of the Mahmoudiéh Canal, and for bridge at Kasr-el-Nil	...	5,260 285
Appointments and expenses of the Ministry of Public Works	...	1,681 345
Appointments and expenses of the Ministry of Public Instruction (besides the revenues of schools which possess large properties)	...	8,740 102
Appointments, expenses, pensions, annual allowances, allowance for the Sourreh, for the Mecca caravan, expenses for the forts of Hedjaz, cost and charges on corn intended for charity, &c.; all registered under the Rouznaméh	...	38,989 231
Appointments and expenses of the Ministries of War and Marine	...	171,247 137
Works contracted for, for the Soudan Railway, and for part of the Canal at Ismaïla, &c.	...	40,000 000
Interest on the Bonds of Rouznaméh	...	18,000 000
Interest on the Suez Canal shares due in the month of July, 1876	...	19,500 000
Annuities and loans (redemptions and interest)	...	982,151 385
		1,751,461 70
A bourse is 500 piastres Tariff. A pound sterling equal to 97½ piastres Tariff.	Say equal to	£8,981,852

INDEX.

Ababdeh Bedoween, 27, 332
Abbas Pasha, 81, 236
Abdeen, Palace of, 91
Aboona, 31
Abou-sar-el-Kibls, 14
Abyssinians, 33
„ Women, 319
Acacia Tree, 341
Accounts, System of, 108
Agriculture, 176
„ Councils of, 116
Alabaster, 309
Alexandria, 38
„ Decadence of, 6
„ Harbour of, 42, 251
„ Italian College at, 229
„ Napoleon's Opinion of, 39
„ Sanitary Reforms in, 43
„ to Cairo, 46
„ Trade of, 46
American Mission School, 230
Ammon, Oasis of, 13
Aphidia, 338
Apis Mausoleum, 334
Arabs, Primary School of, 220
„ Settled, 23
„ Tower, 5
Architecture, European, 306
Argo, 18
Armenians, 34
Army, Regular, 99
Assembly of Delegates, 117
Assiout, 74
Ass, The, 332
Atbara, 362
Audit, Controller-General of, 145
Autumn, 347
Azizieh Misri Company, 103

B.

Backsheesh, 107
Bahinda, Desert of, 361
Bahr-bela-ma, 13
Bahr-el-Ghazal, 367
Bakers and Millers, 305
Baker, Sir Samuel, 366
Balieh, 190
Banana Tree, 343
Barley, 166, 197
Bathen, 9
Beans, Growth of, 197
Belid-es-Soudan, 18
Beni-Ali, 27
„ Hassan, Tombs of, 9
„ Souef, 9, 76
Berenice, Ruins of, 14
Benha, 76
Beys, Military Aristocracy of, 77
Birket-el-Kora, 8
Bisharis, 27, 332
Black Mail levied by King John, 370
„ to Constantinople, 132
Black Slaves, 320
Bones, Shipment of, 169
Bor, 367
Bourlos Lake, 7
Boulak Museum, 62, 306
Bran, 169
Bridge, Kasr-el-Nil, 261
Bridges, 261
British Friendship, 86
„ Mission Schools, 231
Bubastis, Ruins of, 74
Buffalo, The, 334
Byssos of Herodotus, 189

C.

Caillard, Mr., 111
Cairo, 48
„ Citadel of, 54
„ Gates of, 50
„ Hotels of, 56
„ Mosques of, 53
„ Opera House in, 57

Cairo, Population of, 56
„ Roads of, 57
„ Trade of, 63
Caliph, 28
Camel, The, 331
Canal, Bahr-Moïz, 244
„ Chibin El-Koum, 244
„ for Irrigation, 245
„ Ibrahimieh, 243
„ Ismalieh, 243
„ Mahmoudieh 244
„ Menonfieh, 244
„ Navigable, 242
„ Nili, 242
„ Produce, Augmentation of, 193
„ Sifi, 242
Capitulations, The, 107, 282
Caraites, 35
Caravan Merchandise, 170
„ Routes, 11
Carrières des Hyénes, 67
Cataract, First, 17
„ Second, 18
„ Third, 18
Cat, The Domestic, 336
Cattle Murrain, 134
Cave, Rt. Hon. S., 133
Ceramic Art, 303
Cereals, 165
Cherif Pasha, 293
Circassian Girls, 318
Civil Code, 289
„ Jurisdiction, 288
„ School, 219
Climate, Dr. Dalrymple's Report on, 354
„ Dr. Dunbar Walker's Report on, 357
„ Dr. Patterson's Report on, 355
„ Rev. A. Smith's Opinion of, 352
Clot Bey, 358
Clover, Growth of, 199
College, Italian, at Alexandria, 229
„ of El-Azhar, 220
Commerce, 161
Commission for Administering Railways, 145
„ International, 287
„ of Public Debt, 165
Constantinople, Black Mail to, 132
Consular Authority, 284
Controller-General of Audit, 145
Coptic Convents, 12
Copts, 8, 29
Cossier, 8, 14
Cotton, Growth of, 189
„ Produce of, 192
Councils of Agriculture, 116
Court of Appeal, 291
Courts, Opening of New, 291
Credit, Rehabilitation of, 47
Crocodile, The, 336
Crops, Rotation of, 192
Cultivable Area, 19
Cultivation, Rude Method of, 188
Customs, 124
„ Returns, 163
„ Sub-department of, 106
Cypress Tree, 342

D.

Dahabeegah, 62
Daira, 150
„ Khassa, 155
„ Sanieh, 151
Damanhour, 47, 74
Damietta, 5, 64
„ Population of, 65
Date Palm, 339
Darfertit Country, 366
Darfour, 364
Death-rate in Egypt, 351
Debt, Consolidation of, 140
„ Daira, 151
„ Floating, 136
„ Public Commission of, 145
Desert Line, Disadvantage of, 237
„ The, 47
Dhoura, 195
Director of Wakfs, 105
Dog, The, 336
Donga Country, 366
Dongola, 361
Dor Bey, 105
Dromedary, The, 332
Dysentery, 359

E.

Earth-works, Maintenance of, 247
Eastern Telegraph Company, 260
Education Budget, 225
Egg Hatching, Artificial, 307
Egypt, Administration of, 87
„ and the Porte, 77
„ Climate of, 344
„ Death-rate in, 351
„ Debt of, 133
„ Finance of, 121
„ Foreigners Domiciled in, 35
„ for the Egyptians, 85
„ Finance, Organic Law of, 142
„ Garden of, 8
„ Greater, 19

Egypt, Growth of Trade in, 162
„ Home of Science and Philosophy, 208
„ Personal Nature of Government of, 120
„ Population of, 21
„ Proper, 2
„ Proper Towns of, 72
„ Sultan of, 78
Egyptian Credit, Rehabilitation of, 147
„ Navy, 102
„ Official, Character of, 118
„ Ryot, 117
El-Arish, 67
El-Bahari, 5
El-Kizkah, 178
El-Saïd, 5
El-Vostani, 5
Embroidery, 306
Engineering, 307
Esbekieh, 48
Esnafs, 298
Esneh, 76
Etko Lake, 7
Eunuchs, 327
European Architecture, 306
Expenditure, 130
Exports, 163

F.

Fanúr, 34
Fashoda, 366
Fatureh, 305
Fayoum, 7
Fellaheen, Condition of, 26
Fezzan, The, 8
Fig Tree, 343
Fiki, 223
Financial Mal-administration, 95
Firman of 1872, 82
Fish, 338
Fisheries, 312
Flamingoes, 337
Flax, 167, 201
Flour, 169
Foreign Missionary School, 229
Fortified Stations, 367
Forced Labour, Abolition of, 134
Foreign Affairs, Ministry of, 97
Free and Universal School, 228

G.

Gallabat, 370
Gallini, 189
Garden Plants, 198
Gazzuas, 325
Gazelle, The, 357
Geological Regions, 15
Ghawazee, 75
Ghizereh, Palace of, 52
Gileh, 308
Ginning Factories, 191
Girgheh, 76
Glass-blowing, 303
Goats and Sheep, 334
Goldsmith's Work, 306
Gondokoro, 19
Gordon, Colonel, 329
Goschen, Mr., 140
Government Schools, 211
Granite Quarries, 309
Gregorian Calendar, 291
Guarantees, 144
Guava, 343
Guilds, 298
Gum Arabic, 171

H.

Halaybis, 27
Halfi, 362
Harar, 15
Harbour of Ibrahim, 255
„ „ Suez, 253
„ Works, 251
Hasheesh, 202
Heliopolis, 47
Hemp, 201
Henadi, 27
Henna, 169, 202
Hides, 169
Hippopotamus, The, 337
Horns, 169
Horses, Epidemic among, 333
Horse, The, 333
Hussein Pasha, Fehmy, 105
Hyena, The, 337

I.

Ibis, The, 337
Ibrahim Pasha, 79
„ Port, 255
Ichneumon, The, 337
Imports, 172
Indigo, 202
Industries, Skilled, 297
Insects of Prey, 339
Interior, Ministry of, 98
Irrigation, Canals for, 245
„ System of, 182

Irrigation, Want of Efficient, 249
Islam, Peril to, 85
Ismaïlia, 67, 273
„ Baths of, 68
Ismaïl Pasha, Sadyk, 88, 95
Isthmus, Shortest Line Across, 65
Ivory, 171
„ Government Monopoly of, 367

J.

Jackal, The, 337
Jebel Attakah, 70
„ Mokattem, 8
Jews, 34
„ School, 227
Joubert, Mr., 140
Judges, Foreign, 292
Judicial Reforms, 282
Jurisdiction, Criminal, 288
Justice, Ministry of, 97

K.

Kafr-es-Zayat, 47
„ „ Ferry at, 236
Kasr-en-Nil, Palace of, 52
Kasr-en-Noosa, Palace of, 52
Kassim Pasha, 102
Kenneh, 8, 75
Khamsin, 345
Karadjieh, 177
Khartoum, 363
Khedive, The, 82, 87
„ Civil List of, 131
„ Club, 58
„ Daily Work of, 91
„ Winter Palace of, 52
Khedivieh Steam Navigation Co., 62 103
Khoshrew Pasha, 78
Kouttâbbs, 222
Kutaieh, Treaty of, 79

L.

Lagoons, 6
Land, Earnings from, 205
Lapenna, Dr., 292
Lardo, 368
Lemon Tree, 343
Lesseps, M. de, 65
Letters, Delivery of, 112
Lighthouses, 256
Limestone Quarries, 309
Linant Bey, Work of, 250
Loan, European, 133
„ Khedive's, 157
„ Mustapha Pasha's, 157
„ of 1868, 135
„ Second, 134
„ 7 per cent., 136
„ Viceroy's, 157
Loring, General, 102

M.

McKillop Pasha, 258
Mahmal Ferakh, 307
Mahmoudieh Canal, 45
Maize, 166
Mako, 189
Makraka, 368
Malan, Mr. Noel, 104
Mamlouks, 317
Mamours, 115
Manfalout, 7
Mansourah, 75, 321
Manure, 191
Marcotis, Lake, 6, 46
Marriott, General, 235
Massowah, 14
„ Trade of, 72
Mecca, Gifts to, 132
Mechanical Skill, Efforts to Revive, 296
Medical School, 213
Medinet, 9, 76
Medressehs, 222
Mehoz, 27
Mehemet Ali, 78
„ „ Act of Confiscation by, 177
„ Tewfik Pasha, 94
Mekkemehs, 293
Mellâhot, 310
Menzsaleh, Lake, 7, 65
Metal Work, 301
Mex Quarries, 302
Midwifery, School of, 214
Military Seminaries, 210
„ Service, Mixed, 101
„ Train, Want of, 101
Mineral Resources, 308
Mines and Quarries, 11
Minieh, 9, 76
Ministry of Commerce, 10
„ Foreign Affairs, 97
„ Interior, 98
„ Justice, 97
„ Marine, 102
„ Public Instruction, 105

Ministry of War, 98
Miscellaneous Receipts, 129
Miscoweh, 190
Moesis, Lake, 8
Mohafzas, 38
Moie-t-Soohaj, 242
Mokattam Hills, 47
,, Quarries, 302
Money, Extra Payment, 107
,, Order System, 113
Monophysites, 31
Mosque Colleges, 220
,, Land, 177
Mother-of-Pearl, 171
Moukabala Law, 179
Mourabain, 183
Mud Deposit of Nile, 16
Mudirs, 115
Mulberry Tree, 342
Mule, 333
Mushrabeeyal, 306
Muzzi, Signor, 111

N.

Nation, 168
Nazar, 367
Nazirs, 115
Nigritia, 361
Nile, Barrage of, 248
,, Boatmen, 313
,, Blue and White, 363
,, Mud Deposit of, 16
,, Overflows of, 247
,, Voyage, 62
,, Yearly Flood of, 184
Nitre, 309
Nitria, 13
Noggins, 373
Non-Moslem Native Schools, 225
Nóreg, 195
Normal School, 219
Nubar Pasha, Dispatch of, 322
,, ,, Memorandum of, 286
Nubria, 17

O.

Oases, 12
Officers, Education of, 101
Oilcake, 164
Olive Tree, 342
Omer Pasha, 96
Omoo-maroo River, 368
Opthalmia, 352
Opium, 169, 203
Orange Tree, 343
Ordee, 18
Ornithology, 337
Orthodox Community, 34
Ostrich Feathers, 171
Ottoman Party, 85
Oushundjee, 181
Oushurieh, 177
Overland Route, 69
Ox, Divine, 333
Ozy Rivers, 368

P.

Panel Work, 306
Paper Making, 303
Pastry, Love of, 305
Pelicans, 337
Pelusium, Ruins of, 5
Petroleum, 312
Philœ, 10
Pig, The, 335
Pistachio, 343
Plague, 358
Plant Life, 339
Plough, Eastern, 189
Polytechnic, The, 211
Pomegranate, The, 343
Poplar Tree, 342
Porphyry, 309
Porte, Jealousy of, 289
,, Tribute to, 131
Port Saïd, 65
,, Water Supply of, 66
Post-Office, Sub-department of, 106
Prince Hussein Pasha, 96
,, [illegible]fik Pasha, 219
Printing Office, 304
Privy Council, 94
Proportion of Cultivators to Artisans 297
Provincial Administration, 114
Public Instruction, 207
,, ,, Ministry of, 105
,, Works, 131, 234
,, ,, and Agricultural Department, 104
Pumps, 187
Pyramids, Drive to, 60
,, of Gizeh, 47, 61

Q.

Quails, 338
Quarries and Mines, 11
Quattâb, 27

R.

Rabbinists, 35
Ragaff, 368
Raghib Pasha, 104
Rags, 169
Railways, 235
„ Commission for Administering, 145
„ Profits on, 128
„ Scheme of Khedive, 239
„ Working Expenses of, 238
Rainfall, 348
Ramadan, Gifts during, 224
Ramleh, 45
Ras-el-Tin. Point, 42
Ratib Pasha, 102
Ratichambé, 367
Rayah Greeks, School of, 227
Recruiting by Conscription, 100
Remote Provinces, Trade of, 372
Rent Charges, 179
Revenue, Heads of, 122
Riaz Pasha, 105
„ „ Policy of, 224
Rice, 166, 197
River-banks, Care of, 185
Rose Crop, 204
Roses, Plantations of, 8
Rosetta, 5, 63
Rum Distilleries, 151

S.

Safflowen, 203
Saffron, 169
Saïd Pasha, 81
Sakkia, 183
Salt, 168
Saraffs, 180
Schools, American Mission, 230
„ British Mission, 231
„ Civil, 219
„ Foreign Missionary, 229
„ for Jews, 227
„ Free and Universal, 228
„ Government, 211
„ Medical, 209
„ Native Non-Moslem, 225
„ Normal, 219
„ of Midwifery, 214
„ of Rayah Greeks, 227
„ Primary Arab, 220
„ Scottish Mission, 232
Scorpions, 338
Scrivenour, Mr., 106
Sea Salt, 311
Season, High Nile, 205
Season, Summer, 205
„ Winter, 205
Senna, 171
Sennaar, 363
Serrâbeiâ. 27
Sesame, 202
Shadoof, 94, 183
Sheep and Goats, 334
Sheikhs-el-Beled, 115
Sheikh-ul-Islam, 221
Sheriat, 321
Sherif Pasha, 97
Shibeen, 76
Shillook Country, 365
Shitawee, 194
Shoolra, Palace of, 53
Shendy, 362
Simoom, 345
Sinai, 70
Skin Disease, 359
Slave Hunting, 329
„ Markets, 325
„ Trade, 370
Slavery, 316
„ Atrocities, 329
Slaves, Female Price of, 327
„ Liberation of, 321
„ White, 318
Smuggling, 107
Sobat, 367
Somerset River, 368
Soohaj, 76
Sonakim, 14, 71
Soudan, The, 361
Sphinx, The, 61
Spring, 345
Stone, General, 102
Stone, Workers in, 302
Suez, 68
„ Isthmus of, Survey by Bonaparte, 265
„ Port of, 253
„ Prefecture of, 70
„ Canal, Age of, 264
„ „ Award of Napoleon, 269
„ „ Commenced, 268
„ „ Compaigne Universelle, 267
„ „ Concession for Work. 267
„ „ Consent of Porte fo-, 268
„ „ Corvée Labour, 268
„ „ Financial Difficulties of, 270
„ „ Financial Position of, 278
„ „ Khedive's Shares Purchased, 278
„ „ Length of, 270
„ „ Nature of Soil, 271
„ „ Opened, 274
„ „ Return of Shipping, 275

Suez Canal, Sale of Shares, 138
„ „ Sidings, 275
„ „ Transit Charge, 276
„ „ Value to Commerce, 275
„ Waghorer's Quay at, 71
Succession to the Throne, 82
Sugar-cane, Cultivation of, 199
Sugar Factories, 151
Sukkoot, 18
Summer, 316
Sycamore, 340

T.

Taboot, 187
Tabulated Statements, 162
Taceazé, 362
Taka, Province of, 362
Tamasisk, 342
Tamiáthis, 65
Tanners, 202
Tautab, 47, 72
„ Slave Market of, 73
Tarantula, 338
Tarboushes, 300
Taxation, Heavy, 26
Taxes, Indirect, 123
„ Land, 122
Tax on Date Trees, 123
Telegraphs, 258
„ Eastern, Company, 260
Temperature, Regularity of, 348
Territory, Limits of, 2
Thebes, 306
Threshing-floor, 194
Tidjaret Courts, 290
Tiles, Sun-dried, 302
Timsah Lake, 67
Toombak, 202
Tor-Arabs, 27
Toums, 50
Trade, Foreign, Details of, 163
„ Inland, 163
„ Licenses, 123
Transport, Difficulties of, 373
Treaty of 1840, 80
Treasury, Difficulties of, 138
Tribunals, New, Confidence in, 294
„ Mixed, 288
„ of First Instance, 291
Tripoli, 8
Trona, 13
Turkish Element, 28

V.

Valley of the Wanderings, 8
Viaducts, 246
Viceroy, Monopolies held by, 189
„ Sovereignty of, 83
Victoria Lake, 368
Village Annuities, 125
„ Bonds, 127

W.

Wády Keñoos, 17
Wady Natroon, 13
„ Nouba, 17
Waghorn, Lieutenant, 266
Wakfs, 177
„ Director of, 105
Walnut Tree, 343
War, Ministry of, 98
Water Supply, 184
Wax, 169
Weavers, 300
Whateley, Miss, 231
Wind, Perodical Course of, 351
Wood, Workers in, 301
Wool, 169

Y.

Yáourt, 334

Z.

Zagazig, 73

CASSELL PETTER & GALPIN, BELLE SAUVAGE WORKS, LONDON, E.C.

In One Volume, Demy 8vo, with MAPS, price **21s.**

TURKEY IN EUROPE,

By Lieut.-Colonel JAMES BAKER.

"Colonel Baker has worked up with diligence, and recapitulated with brevity and distinctness, all that he could learn as to the ethnology, migrations, conquests, and defeats of Bulgarians, Greeks, Turks, Albanians, Servians, and Montenegrins. He has put together all the facts he could collect as to the educational, judicial, financial, military, and naval systems of Turkey. Of all that he speaks of from personal knowledge he is a trustworthy witness, calm, shrewd, and impartial. Of all that he speaks of from historical and other printed documents, he is a trustworthy compiler, intelligent, concise, and rapid. As a traveller, Colonel Baker inserts the usual traveller's stories, to give variety and relief to his statistics and his discussions."—*Saturday Review.*

"It is impossible to imagine any work on European Turkey more complete in its information, more circumspect in its judgments, more comprehensive in its view, more thorough and accurate in its facts."—*World.*

"The Author deals with almost every question which has arisen in connexion with European Turkey, and he gives a great deal of interesting information on the subject of travelling, farming, the manners and customs of Jews and Gipsies in Turkey, the work done by the American Missionaries, the plan of education at Robert College, and so on."—*Athenæum.*

"In the description of men and manners the humorous is pleasantly blended with the appreciative, while that of landscape and scenery is vivid and unconstrained."—*Academy.*

"Colonel Baker's Book is very exceptionally valuable on three grounds: first, because of the glimpses it gives of the social and domestic conditions of the inhabitants; secondly, on account of the practical information it contains about Turkish agriculture; and thirdly, for Colonel Baker's account of the organization and condition of the Turkish military forces."—*Scotsman.*

"We can heartily recommend the work to our readers as a pleasant, entertaining, and instructive account of a country important to the first degree at the present moment, but one of which a great deal too little is known."—*Live Stock Journal.*

Cassell Petter & Galpin: London, Paris and New York.

In Two Volumes, cloth, with MAPS, price **24s.**

RUSSIA,

By D. MACKENZIE WALLACE, M.A.

"Undoubtedly the best book written on modern Russia by a foreigner, and one of the best books ever written on that country by either foreigner or native."—*Times.*

"Mr. Wallace's book deserves a cordial welcome, as much for the opportuneness of its publication as for its intrinsic excellence."—*Quarterly Review.*

"This very complete and thoroughly interesting work appeals to many classes of readers. It is full of information; it abounds in views on every question which has agitated Russian society in modern times; and it contains a large number of clever characteristic sketches of Russians of all classes and conditions."—*The Pall Mall Gazette.*

"What Mr. Wallace says about the Eastern Question is likely to be read with special interest just now, as conveying the opinions of one who is exceptionally qualified to speak upon the subject, not only by knowledge of a most rare kind, but also by a singular capacity for seeing both sides of a question."—*Academy.*

"As an account of the social and political condition of Russia this book may truly be pronounced the best yet published in the English language. It is, moreover, written in a style so clear and buoyant, and its contents are so well arranged, that the reader's interest is kept up, without any sense of weariness, to the end."—*Guardian.*

"Le livre de M. Wallace, que ses compatriots liront avec plaisir et profit, ne laissera pas d'avoir son utilité pour les Russes eux-mêmes, qui y trouveront souvent plus d'impartialité que dans les jugements de leurs propres auteurs."—*Journal des Debats.*

"Das rechte buch zur rechten zeit."—*Frankfurter Zeitung.*

"We congratulate the author on having written a book of which it may be said that, as to its topic, it has, in the French phrase, *fait époque*; it has made a difference in the intelligence with which a very important subject may be regarded."—*New York Nation.*

Cassell Petter & Galpin: London, Paris and New York.

Demy 8vo., 500 pp., cloth, **£1 1s.**

A RIDE TO KHIVA.

TRAVELS AND ADVENTURES IN CENTRAL ASIA,

By CAPTAIN BURNABY.

"Captain Burnaby has published a charming and instructive book at an opportune moment."—*Times.*

"It is the best compliment we can pay the writer that we lay the book down with a wish that there were more of it. There are comparatively few volumes of travel about which the same could be said."—*Scotsman.*

"Captain Burnaby's book is emphatically the book of the season, appearing not only at just the right nick of time, when all eyes are turned to the East, and universal interest attaches to the attitude of Russia, but being, besides, singularly refreshing, outspoken, and unique."—*Irish Times.*

"Captain Burnaby's book is interesting throughout. It contains much useful information, and a spirit of light humour pervades the whole volume. His description of his ride on a camel crossed in love is so amusing that it leaves a feeling of want behind; insomuch that we confess we should have intensely relished witnessing his discomfiture ourselves."—*Army and Navy Gazette.*

"From the first page to the last there is no dull writing in the book. It possesses the charm and ease of good conversation, and carries the reader along with all the dash of the Ride it records.—*World.*

"The book charms like a novel, and yet bears the impress of truth on every page. We hear a good deal about 'the book of the season,' but if ever the term was rightly applied it is to 'A Ride to Khiva.'"—*Field.*

"Captain Burnaby's 'Ride to Khiva,' which has come forth most opportunely, combines the freshness of youth with the vigour of manhood, and deserves a high rank among the books of travel. We can only close the book with a recommendation of its contents to all who would understand fairly and impartially the question between Turk and Russ."—*Daily Telegraph.*

"All this makes the book equally fitted to interest politicians and to delight young ladies, and at once place it in every drawing-room in London, and command for it a place on the shelves of every library in the country."—*Vanity Fair.*

Cassell Petter & Galpin: London, Paris and New York.

THE NEW SHAKSPERE.

Dedicated by permission to H.R.H. PRINCE LEOPOLD.

The Leopold Shakspere.

The Poet's Works, in Chronological Order, from the Text of Professor DELIUS, with "Edward the Third" and "The Two Noble Kinsmen," and an Introduction by F. J. FURNIVALL. With about **400 Illustrations.** 1,184 pages, small 4to. **10s. 6d.**

"A handsome octavo volume of more than a thousand pages, with double columns, and illustrated. Mr. Furnivall has furnished an excellent introduction, with plentiful information about the man and what he wrote. This is as handy an edition of the whole of Shakspere as we have seen."—*Spectator.*

"The handsomest one-volume edition of the poet's works yet published. A portable-sized quarto of nearly 1,200 pages, comprising both the plays and the poems, illustrated with many hundreds of original engravings, interspersed with the text, and enriched with many other ornamental features."—*Daily News.*

"This edition of Shakspere's works is admirably printed and got up."—*The Standard.*

"The book will appeal successfully, we believe, to two classes of purchasers, those who are real Shakspere students, who will be glad of it for critical purposes, and those who desire a handsome volume for a gift."—*Church Times.*

"This volume is the latest and ripest fruit of the Victorian school of Shakspere criticism. Never before has the greatest of poets appeared in so full and fitting dress as in this half-guinea small 4to."—*Edinburgh Daily Review.*

"The publication of this handsome quarto volume will inaugurate quite a new era to the ordinary Shaksperian student."—*Bradford Observer.*

"An elaborate critical introduction is written by Mr. J. Furnivall, including an admirable biographical sketch of Shakspere, an elaborate examination of the order of his writings which has much new interest, and a critical estimate of the relative merits of these according to their successive claims."—*Liverpool Albion.*

Cassell Petter & Galpin: London, Paris and New York.

A SELECTION FROM

Cassell Petter & Galpin's Volumes.

Picturesque Europe.

Vols. I. and II. now ready, comprising The BRITISH ISLES Complete. Each Vol. containing Thirteen Exquisite Steel Plates, from Original Drawings by BIRKET FOSTER, E. M. WIMPERIS, P. SKELTON, D. MCKEWAN, W. LEITCH, H. FENN, S. READ, J. MOGFORD, J. B. SMITH, J. COOK, and J. CHASE; and nearly 200 Original Illustrations drawn on the Wood by Eminent Artists. Royal 4to, 300 pages, cloth gilt, gilt edges, £2 2s. each; full morocco elegant, £6 6s. each.

*** *Vols. I. and II. can also be obtained bound together in One Volume.*

"Certainly we know of nothing to compare with PICTURESQUE EUROPE."—*Art Journal.*

"Nothing has hitherto been done on the scale of PICTURESQUE EUROPE."—*World.*

*** *PICTURESQUE EUROPE is also published in Monthly Parts, price 2s. 6d. each.*

The Great Painters of Christendom, from

CIMABUE to WILKIE. By JOHN FORBES-ROBERTSON. Illustrated throughout with carefully-executed Engravings of the Masterpieces of the several Painters. Royal 4to, cloth elegant, gilt edges, £3 3s.

The Royal Academy Album 1877.

Consisting of a Series of Permanent Photographs from the Choicest Works of Art in the Royal Academy of 1877. Edited by SAMUEL JENNINGS, F.L.S. Handsome 4to, cloth, gilt edges, £3 3s.

Cassell Petter & Galpin: Ludgate Hill, London; Paris; and New York.

The Life of Christ.

By the Rev. F. W. FARRAR, D.D., F.R.S., Canon of Westminster and Chaplain in Ordinary to the Queen. Complete in Two Volumes, cloth, price 24s.; calf or morocco, £2 2s.; tree calf, £2 5s. With each Volume is a Frontispiece by Mr. HOLMAN HUNT.

"There is a great demand in the present day for books which will furnish serious and at the same time interesting matter, and orthodox writers can render few better services to their faith than by presenting its familiar facts and truths in forms which will attract the perusal of all thoughtful or cultivated minds. Dr. Farrar's work is an eminent example of an effort of this character. Few who commence it will fail to be carried on by the interest of the narrative; and we commend it to the best attention of our readers."—*Times.*

"Dr. Farrar may certainly be congratulated upon a literary success to which the annals of English theology present no parallel."—*Quarterly Review.*

The Bible Educator.

Edited by the Rev. E. H. PLUMPTRE, D.D., assisted by some of our most Eminent Scholars and Divines. With about 400 Illustrations and Maps. Complete in Four Volumes, extra crown 4to, cloth, 6s. each; or in Two Double Volumes, cloth, 21s., half-calf, marbled edges, 31s. 6d.

"We have no hesitation in placing the 'Bible Educator' beyond and above any similar work which has as yet appeared in this country, for the value of its authority, and varied extent of its information."—*Standard.*

Some Difficulties of Belief.

By the Rev. T. TEIGNMOUTH SHORE, M.A., Incumbent of Berkeley Chapel, Mayfair. Post 8vo, cloth, 6s.

"Mr. Shore is a clear, strong thinker, and he puts his points in a lucid, popular form. The volume will be very helpful to religious minds who feel the pressure of such difficulties. The volume is in every way wise and strong and seasonable."—*British Quarterly Review.*

Egypt as It Is.

By J. C. McCOAN, late Editor of the *Levant Herald.* One Volume, demy 8vo, cloth, with Map, £1 1s.

Turkey in Europe.

By Lieut.-Col. JAMES BAKER. One Vol., demy 8vo, with Maps, £1 1s.

"It is impossible to imagine any work on European Turkey more complete in its information, more circumspect in its judgments, more comprehensive in its view, more thorough and accurate in its facts."—*World.*

Russia.

By D. MACKENZIE WALLACE, M.A., Member of the Imperial Russian Geographical Society. An account of the Political, Social, and Domestic Life of the Russian People; with special reference to the Emancipation of the Serfs, and the relation of Russia to the Eastern Question. Two Vols., with Maps, 24s.

"Undoubtedly the best book written on modern Russia by a foreigner, and one of the best books ever written on that country by either foreigner or native."—*Times.*

A Ride to Khiva.

Travels and Adventures in Central Asia. By CAPTAIN BURNABY, Royal Horse Guards. With large Maps showing Districts Traversed, &c., £1 1s.

"The book charms like a novel, and yet bears the impress of truth on every page. We hear a good deal about 'the book of the season,' but if ever the term was rightly applied it is to 'A Ride to Khiva.' "—*Field.*

The Leopold Shakspere.

The Poet's Works, in Chronological Order, from the Text of Professor DELIUS, with "Edward the Third," and "The Two Noble Kinsmen," and an Introduction by F. J. FURNIVALL. With about 400 Illustrations. 1,184 pages. Small 4to, 10s. 6d. Dedicated by permission to H.R.H. PRINCE LEOPOLD.

"The handsomest one-volume edition of the poet's works yet published. A portable-sized quarto, of nearly 1,200 pages, comprising both the plays and the poems, illustrated with many hundreds of original engravings interspersed with the text, and enriched with many other ornamental features."—*Daily News.*

England, Cassell's History of.

From the Earliest Period to the Present Time. With about 2,000 Illustrations. NEW TONED PAPER EDITION. Complete in Nine Vols., cloth, each, 9s. Library Edition, bound in brown cloth, gilt tops, £4 10s.

United States, Cassell's History of the.

With 600 Illustrations and Maps. 1,900 pages, extra crown 4to. Complete in Three Vols., cloth, 9s. each.

India, Cassell's History of.

With about 400 Maps, Plans, and Illustrations. 1,150 pages, extra crown 4to. Complete in Two Vols., cloth, 9s. each.

The War between France and Germany, Cassell's History of.

With 500 Engravings and Plans of the Battle-fields. Complete in Two Volumes. Extra crown 4to, cloth, 9s. each; or bound in half-calf, 30s.

British Battles on Land and Sea.

By JAMES GRANT, Author of the "Romance of War," &c. With about 600 Illustrations. Complete in Three Vols., extra crown 4to, cloth gilt, 9s. each.

Old and New London.

A narrative of its History, its People, and its Places. In Volumes each containing 200 Illustrations. (*To be completed in Six Volumes.*)

VOLS. I. and II., by WALTER THORNBURY, contain the History of that portion of the Metropolis which lies East of Temple Bar. Cloth, 9s. each.

VOLS. III. and IV., by EDWARD WALFORD, contain the History of London West of Temple Bar, including the Strand, Westminster, Whitehall, the West End Squares, Regent Street, Piccadilly, Hyde Park, Oxford Street, Bloomsbury, &c. &c. Cloth, 9s. each.

VOL. V. contains the Western and Northern Suburbs.

The History of Protestantism.

By the Rev. J. A. WYLIE, LL.D. With upwards of 600 Original Illustrations. 1,900 pages, extra crown 4to. Complete in Three Vols., cloth, 9s. each.

The Races of Mankind.

A Description of the Characteristics, Manners, and Customs of the Principal Varieties of the Human Family. By ROBERT BROWN, M.A., Ph.D., F.L.S., F.R.G.S. Complete in Four Vols., containing upwards of 500 Illustrations. Extra crown 4to, cloth gilt, 6s. per Vol.; or Two Double Vols., £1 1s.

The Countries of the World.

Containing Graphic Sketches of the various Continents, Islands, Rivers, Seas, and Peoples of the Globe, according to the Latest Discoveries. By ROBERT BROWN, M.A., Ph.D., F.L.S., F.R.G.S. Vol. I., with 130 Illustrations and Maps. Extra crown 4to, cloth, 6s.

The Book of the Horse.

Thorough-bred, Half-bred, Cart-bred, Saddle and Harness, British and Foreign; with Hints on Horsemanship, the Management of the Stable, Breeding, Breaking, and Training for the Road, the Park, and the Field. By SAMUEL SIDNEY. With Twenty-five *fac-simile* Coloured Plates from Original Paintings, and 100 Wood Engravings. Demy 4to, 600 pages, cloth bevelled, gilt edges, 31s. 6d.; half-morocco, £2 2s.

The Book of Poultry.

By L. WRIGHT. A Complete and Practical Treatise on the Breeding, Rearing, and Management of Every Known Variety of Poultry. With Fifty exquisite Coloured Portraits of Prize Birds painted from Life, and numerous Wood Engravings. Demy 4to, 600 pages, cloth, gilt edges, 31s. 6d.; half-morocco, £2 2s.

The Book of Pigeons.

By ROBERT FULTON, assisted by the most Eminent Fanciers. Edited and arranged by LEWIS WRIGHT. With Fifty life-like Coloured Plates, and numerous Engravings on Wood. Demy 4to, cloth bevelled, gilt edges, £1 11s. 6d.; half-morocco, gilt edges, £2 2s.

Illustrated Travels.

A Record of Discovery, Geography, and Adventure. Edited by H. W. BATES, Assistant Secretary of the Royal Geographical Society. Profusely Illustrated. Complete in Six Vols., royal 4to, each containing about 200 Illustrations, cloth 15s.; cloth gilt, gilt edges, 18s. each. (*Each Volume is complete in itself.*)

The National Portrait Gallery.

Each Volume containing Twenty Portraits, printed in the best style of Chromo-Lithography, with accompanying Memoirs, from authentic Sources. Demy 4to, 12s. 6d. each. VOL. I. contains :—

Mr. GLADSTONE.
Mr. DISRAELI.
Mr. BRIGHT.
EARL OF DERBY.
ARCHBISHOP of CANTERBURY.
LORD CHIEF JUSTICE COCKBURN.
SIR GARNET WOLSELEY.
EARL OF SHAFTESBURY.
EARL RUSSELL.
LORD CAIRNS.
EARL GRANVILLE.
DUKE OF CAMBRIDGE.
BISHOP OF MANCHESTER.
SIR S. NORTHCOTE.
Mr. JOHN WALTER.
Mr. THOMAS CARLYLE.
LORD DUFFERIN.
Mr. W. H. SMITH.
Rev. W. MORLEY PUNSHON.
DUKE OF ARGYLL.

VOL. II. contains :—

Mr. ALFRED TENNYSON.
Mr. J. E. MILLAIS.
SIR WILFRID LAWSON.
DEAN STANLEY.
Rev. C. H. SPURGEON.
Mr. HOLMAN HUNT.
Mr. W. E. FORSTER.
DUKE OF SUTHERLAND.
Mr. SAMUEL MORLEY.
DUKE OF RICHMOND.
MARQUIS OF SALISBURY.
SIR MICHAEL COSTA.
Hon. ALEX. MACKENZIE.
Mr. GATHORNE HARDY.
BISHOP OF PETERBOROUGH
Mr. R. A. CROSS.
SIR JOHN A. MACDONALD.
Rev. H. ALLON.
MARQUIS OF HARTINGTON.
Mr. ROBERT LOWE.

VOL. III. contains :—

LORD LYTTON.
DUKE OF ABERCORN.
SIR TITUS SALT.
LORD SELBORNE.
Mr. SIMS REEVES.
DUKE OF WESTMINSTER.
Mr. JOHN RUSKIN.
LORD HOUGHTON.
SIR WILLIAM VERNON HARCOURT.
CANON FARRAR.
THE ARCHBISHOP OF YORK.
Mr. SAMUEL PLIMSOLL.
PROFESSOR HUXLEY.
Mr. WILLIAM CHAMBERS.
DUKE OF BEAUFORT.
PROFESSOR TYNDALL.
Mr. SANTLEY.
BARON ROTHSCHILD.
LORD ELCHO.
DULEEP SINGH.

The Book of Birds.

Translated from the Text of Dr. BREHM, by Prof. T. RYMER JONES, F.R.S. With 400 Wood Engravings, and Forty Coloured Plates from Original Designs by F. W. KEYL. Four Vols., 4to, cloth, 7s. 6d.; gilt edges, 10s. 6d. each. Or Two Vols., cloth, gilt edges, £1 10s.; half-calf, £2 2s.

The World of the Sea.

Translated from the French of MOQUIN TANDON, by the Rev. H. MARTYN-HART, M.A. Illustrated. Cloth, 10s. 6d.

Louis Figuier's Popular Scientific Works.

New and Cheaper Editions. Containing all the Original Illustrations, the TEXT REVISED AND CORRECTED, price 7s. 6d. each :—

The Human Race. Revised by ROBERT WILSON.
Mammalia. Revised by Professor E. PERCEVAL WRIGHT, M.D.
The World Before the Deluge. Revised by W. H. BRISTOW, F.R.S.
The Ocean World. Revised by Prof. E. PERCEVAL WRIGHT, M.D.
Reptiles and Birds. Revised by Captain PARKER GILLMORE.
The Insect World. Revised by Professor DUNCAN, M.D., F.R.S.
The Vegetable World. Revised by an Eminent Botanist.

Transformations of Insects.

By P. MARTIN DUNCAN, M.D., F.R.S. With 240 highly-finished Engravings. *New and Cheaper Edition.* Demy 8vo, cloth, 7s. 6d.

The Doré Gallery.

Containing 250 of the finest Drawings of GUSTAVE DORÉ. With descriptive Letterpress and Memoir by EDMUND OLLIER. Small folio, One Vol. complete, cloth gilt, £5 5s.; complete in Two Vols., £5 10s.; full morocco elegant, £10.

The Doré Scripture Gallery of Illustration.

250 Drawings of Scripture Subjects, by GUSTAVE DORÉ. With an Essay, Critical and Historical, on Sacred Art, by EDMUND OLLIER. Complete in Two Vols., cloth extra, £5 10s.; or Four Vols., cloth extra, £6 6s.

The Doré Bible.

With 238 Illustrations by GUSTAVE DORÉ. Small folio, cloth, £8; morocco, gilt edges, £12; best morocco, gilt edges, £15.

Royal 4to Edition. Complete in Two Vols., bound in plain morocco, £4 4s.; best morocco, £6 6s.

Milton's Paradise Lost.

Illustrated with full-page Drawings by GUSTAVE DORÉ. *New Edition*, cloth extra, £2 10s.; full morocco, gilt, £6 6s.

Dante's Inferno.

Illustrated by GUSTAVE DORÉ. Crown folio, cloth, £2 10s.; full morocco, £6 6s.

Dante's Purgatory and Paradise.

Illustrated by GUSTAVE DORÉ. Uniform with the INFERNO, and same price.

Don Quixote.

With about 400 Illustrations by GUSTAVE DORÉ. Royal 4to, cloth, £1 10s.; full morocco, £3 10s.

Atala.

By CHATEAUBRIAND. Illustrated by GUSTAVE DORÉ. *New Edition.* Cloth, £1 1s.

La Fontaine's Fables.

Illustrated by GUSTAVE DORÉ. Royal 4to, 840 pp., cloth, £1 10s.; morocco, £3 10s.

Royal Quarto Shakespeare.

Edited by CHARLES and MARY COWDEN CLARKE, and containing about 600 Illustrations by H. C. SELOUS. Printed in new large type on royal 4to paper. Complete in Three Vols., cloth gilt, gilt edges, £3 3s.; morocco, £6 6s.

Shorter English Poems.

By Professor HENRY MORLEY. Being Vol. I. of CASSELL'S LIBRARY OF ENGLISH LITERATURE. Containing the Leading Characteristic Shorter Poems of English Literature, from the Earliest Period to the Present Time, with upwards of 200 Illustrations. Extra crown 4to, 512 pages, cloth, 12s. 6d.

A First Sketch of English Literature.

By Professor HENRY MORLEY. Crown 8vo, 912 pages, cloth, 7s. 6d.

Dictionary of Phrase and Fable.

Giving the Derivation, Source, or Origin of Common Phrases, Allusions, and Words that have a Tale to Tell. By the Rev. Dr. BREWER. Demy 8vo, 1,000 pages, cloth, 7s. 6d.

Pictures from English Literature.

With Twenty full-page Illustrations by E. M. WARD, R.A., J. C. HORSLEY, R.A., W. F. YEAMES, A.R.A., and others. The Text by J. F. WALLER, LL.D. Cloth, 7s. 6d.; cloth gilt, gilt edges, 10s. 6d.

Homely Scenes from Great Painters.

With Twenty-four full-page copies of Famous Pictures, printed by the Woodbury process. With descriptive Text. Demy 4to, cloth gilt, 15s.

Art Studies of Home Life.

With Twenty-four full-page copies, printed by the Woodbury process, of Famous Pictures. With descriptive Letterpress. Demy 4to, cloth gilt, 15s.

Sketching from Nature in Water-Colours.

By AARON PENLEY. With Illustrations in Chromo-Lithography, after Original Water-Colour Drawings. Super-royal 4to, cloth, 15s.

Principles of Ornamental Art.

By F. E. HULME, F.L.S., F.S.A., Art Master in Marlborough College. With over 400 Designs. Royal 4to, cloth, 25s.

Studies in Design.

For Builders, Architects, Designers, House Decorators, and Manufacturers. By CHRISTOPHER DRESSER, Ph.D., F.L.S., &c. Consisting of Sixty Original Designs by the Author, accompanied by descriptive Letterpress. Demy folio, cloth, £3 3s.

☞ **CASSELL PETTER & GALPIN'S COMPLETE CATALOGUE,** *containing a List of Several Hundred Volumes, including Bibles and Religious Works, Fine Art Volumes, Children's Books, Dictionaries, Educational Works, Hand-Books and Guides, History, Natural History, Household and Domestic Treatises, Science, Serials, Travels, &c. &c., sent post free on application.*

Cassell Petter & Galpin; Ludgate Hill, London; Paris; and New York.

Digitized with financial assistance from
Hemendra Kothari
on 06 November, 2019